

THE
**YOUTH'S
COMPANION**

HUNDREDTH YEAR

1926

SEPTEMBER 16



"THROUGH THE DRAGON'S TEETH"
See page 662

In this issue - Stories by Norrell Gregory, E. E. Harriman, Margaret Warde,
MacGregor Jenkins, Wallace E. Mather. "Football—1926," by Jackson L. Cannell

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Things We Talk About

AMONG THE HUNDREDTH BIRTHDAY LETTERS, now coming in more rapidly than ever, is this one from Miss Maggie Caton, of Hastings, Neb.: "I wonder if you will let me write a letter of congratulation? I am not as old as some of the subscribers who have written, but The Youth's Companion and I have been on the most companionable terms for more than fifty years. It first came as a Christmas present from a neighbor whose children enjoyed it.

"My parents were among the pioneers here, and in those early days there was often little money to spend except for necessities. But somehow, father always managed to find the subscription price of the Y. C. There were a brother and two sisters younger than I to read it, and father was not a whit behind us in welcoming its coming. Father took the Chicago Inter-Ocean for general news of the great world that lay somewhere beyond the far horizon of these seemingly boundless prairies. Except school books, the Y. C. and the I.-O. were our only reading matter for a number of years. I think the Y. C. did more than anything else to form our taste for good reading. From its editorials and short articles we gained knowledge of religious, educational, historical and political events that we could gain in no other way. And the stories were always so good. I have always loved stories of animal life, and the Y. C. has had so many of them."

"And the Old Squire and Grandmother Ruth seem like some of my own folk. I can't see how so many interesting things can have happened to one family. But that family lived among streams, mountains, forests, bears, wildcats and all sorts of other lovely things. We don't have any of them here—just "draws," coyotes, jack rabbits, and so forth. But I suppose Mr. C. A. Stephens could dig stories out of coyote dens and rabbit burrows. Of course, in the early years we had herds of antelope, a few buffaloes, and a few deer; armies of Indians; great prairie fires, miles in extent; and billions of grasshoppers. Mr. Stephens could certainly have found stories then."

"The girl who was I, so long ago, was passionately fond of poetry, and the Y. C. brought her good poems. How those first Y. C.'s were treasured and read over and over, until they were literally worn out! When they began to come to pieces, I clipped every scrap of rhyme and some of the short articles, until I had a collection of more than five thousand pieces. The box I kept them in was a treasure chest when we had to speak pieces at school."

"For many years, I have passed on the Y. C. when we have finished reading it. During the World War it went to the soldier camps. Since then, it has gone out to the old home farm, where there are now a number of young people to enjoy it. I am glad the Y. C. is giving so many good and interesting things for young people. How helpful they must be to many who could not otherwise obtain this training! And what a difference there is in the appearance of the Y. C.! The new cover pages are fine. I like them. "One hundred years of good things, of helpful and uplifting things for young people. What a record of which to be proud! May the next hundred years be better, if that is possible! And I want to say to all who had a part in making The Youth's Companion, from editor-in-chief to 'office dog' and 'printer's devil,' God bless them every one!"

FROM JAGDALPUR, BASTAR, C.P., comes another of the letters, from our young friend, Louise Campbell, who writes: "Do you get many letters from India? The Youth's Companion finds its way to this station in a feudatory state, one hundred and twenty miles from any railway, and I'm writing to tell you how much it is appreciated, especially Hazel Grey's page. My cousin first gave me a year's subscription to the Y. C. in 1919 for my birthday, and my father has kept it coming ever since then. I look forward to it every week, and enjoy every page. I'm the only 'child'—I'm seventeen years old—in this place among nine grown-ups, so I get rather lonesome after having been in a big boarding-school for nine months each year for nine years."

"I like your contests, and wish I could have joined the College Contest, because I hope to go to a college in Illinois next year, but when I got the announcement the contest had closed. But it was lots of fun read-

ing the results. Those articles on graphology were fine. What I read of my character seemed perfectly true. The grown-ups were all much interested. One more thing: that story, The Glory of Peggy Harrison, was lovely. I hope there will be more like it soon."

WE REFER THIS LETTER to the Messrs. Loraine and Henderson, who wrote the serial about Peggy Harrison, and have only recently concluded their later story, Jack Farrington's Beanstalk. Nothing pleases authors more than to know that their work is appreciated. Now, a question. Would you rather have a story about a girl or a boy by these two writers? If you will answer, your letter or postal card will be very helpful.

DIPPING AGAIN INTO THE HUGE FILE of Hundredth Birthday letters, we find one from Mrs. T. B. Ross, of Uhrichsville, Ohio. "Last Sunday," she writes, "I heard Bishop Birney, Methodist Episcopal Bishop of China, make an address in the church of his childhood home. He said he thought it was reading The Youth's Companion that had inspired his life work. Every Thursday, he said, his mother had to settle a friendly dispute about which of the family would read it first."

The roster of famous men who say very much the same thing that Bishop Birney says is so long that it will never be possible to print all the names in this column. For instance, there was at Port Huron, Mich., many years ago, a boy known to his family and to the neighbors as Al. The world knows him now as Thomas Alva Edison. His mother had been a school-teacher before her marriage, and she guided him in his first attempts at reading. Soon he received from his father a prize of ten cents for every book he would read. But it was The Youth's Companion and a Dictionary of Science which fired his imagination, and started him on the course of experiments which have made him immortal. But this is a story which cannot be summarized here, and will be told in full in one of the forthcoming issues.

THIS COLUMN BELONGS TO OUR OLD FRIENDS, in private life, and the next letter in the sheaf of Hundredth Birthday letters is from our friend, Miss Carrie O'Neal, of Bellevue, Ky. "On a cold winter evening last year," she says, "a strange woman came to my door. It was nearly midnight, and she was looking for a neighbor who had employed her to help with the work. I invited her to come in, and during her stay she began to relate a story that The Youth's Companion had published. And then she paid The Companion the highest tribute that it is possible for any human being to pay. She said: 'My idea of home is a place where you can sit down and read The Youth's Companion.' "

FROM PHOENIX, ARIZ., COMES THIS LETTER from Mrs. Florence Webb Hanlon: "For many years I took The Youth's Companion regularly for my boy. With it, I taught him to love the clean and good things in reading matter. I have often been grateful for the happy hours we spent with The Companion, which still maintains its fine ideals and high moral tone. I wish sometime you would speak about the motion pictures. From the time they began I have noted the terrible suggestiveness of the average picture on the minds of the young. I go perhaps once a year, to please some friend, and I cannot see much improvement either in the pictures or in the faces of those who attend. Children of eight and ten are deeply impressed by a picture. Won't you please study this condition a little? You have my best wishes for The Companion, and for all who have made it a force for good in life's difficult journey. When my grandchildren grow older, they too shall have The Companion."

By a happy coincidence, just as this letter was being written, The Youth's Companion started to publish regularly on the Miscellany Page a short list, revised each week, of current motion pictures which are not only clean but interesting and worth while. As this list is changed each week, it is a good plan to clip it out and compare it with the current productions at the theatre which you, or your children, attend. The six or seven pictures which are mentioned each week are the best among dozens, even hundreds, which are visited in your behalf.

THE YOUTH'S COMPANION

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HERE is a certain part of Indiana where the soil is so productive and the climate conditions so favorable that it bears the name of "Sugarland." Indeed, it has borne this name so long that many people living there and in the surrounding country know none other for it. It is bounded on one side by a county line, on another by a town, on another by a river, and on the fourth by a state road.

Threshing men always made an effort to clean up neighboring "sets" as quickly as possible and get into that section, because the wheat yielded more, and because the "sets"—a "set" is the amount of wheat threshed on one farm—were large and close together, which reduced to a minimum the amount of "pulling" from one farm to another. Moreover, the roads were better. In fact any threshing man could give a large number of reasons why threshing was most profitable there.

These very advantages were the cause of much friction among threshing men and of dissatisfaction among the farmers. Sometimes there were eight or ten different "rigs" in the community—a condition that was objectionable because it prevented the farmers from helping one another. Moreover, the threshing men always rushed the work in order to get as much of the "picking" as possible, and consequently much of the valuable grain was "blown over" into the straw pile. Many straw stacks became green with sprouted wheat after a few rains.

When they had endured these conditions for some time, the farmers finally found them so disagreeable that they met to decide upon a remedy. The result was that every man who owned or controlled a threshing rig, and who intended making Sugarland his goal, received a letter.

Clem Ward sat on the doorstep of his home, frowning over a letter the mail carrier had just left. He was a clean-cut young fellow of twenty, working on his father's farm during the summer to pay his expenses during the winter in an agricultural college.

Rising, he went into the house and laid the letter before his father.

"Read that, Dad," he said. "I thought it was for me, our names being the same."

His father read aloud:

Dear Sir: Owing to the unsatisfactory conditions that result from a large number of threshing rigs coming into this locality every year, we have decided to give the entire amount of wheat to be threshed in this settlement to the first machine that pulls in.

It was signed by the secretary of the farmers' corporation of Sugarland.

His father was astounded. "We're in a nice fix, aren't we? Three sets here to make, and our drum smashed!" He referred to an accident that had occurred two days before when a pitchfork had gone through the machine and played havoc with the big drum. "And we can't get those repairs before day after tomorrow."

"Yes, and Big Ike's rig has only two days here, and he's at it now," said Clem, pointing to a spiral of smoke half a mile distant. "Even if we didn't have a bundle to thresh here, we couldn't get those repairs in time to get into Sugarland ahead of him. We'll be the last ones to pull in. I suppose we shall have to pull round over these hills and thresh about a thousand bushels a day and make enough to pay our expenses."

"I'm afraid it can't be helped, Clem," said Mr. Ward, "but let's go over to the machine. Maybe we can patch her up without the repairs."

The new separator was at a neighbor's a quarter of a mile distant, where the accident had occurred. When they arrived Clem stopped, looked at the wide mouth of the cylinder and said despondingly: "Think of it! That big mouth just hungry for wheat and capable of taking and digesting more than any machine hereabouts, and knocked out by a little old pitchfork! Shucks!"

He followed his father round to the rear of the machine, and together they viewed the damage. It was hopelessly beyond repair without new parts. The cylindrical covering was ripped half open where the fork had emerged, and half of the blades of the fans were demolished.

"It's no use, Dad," said Clem hopelessly.

father. "Let's go home and call the men so that they can be on hand early in the morning."

The next morning long before day Clem was feeding coal into the fire box of the big thirty-five-horsepower engine, and before sunup the whistle, under a hundred and fifty pounds of steam, was hoarsely calling the men to work.

Across the fields came an answering whistle from Big Ike's rig; it seemed that he also had received a letter. As the men had been informed of the situation, they wasted no time in rolling in the wheat.

"We'll choke your old rig up so full you'll never get her empty," jestingly remarked the neighbor who had brought the telegram to Clem the evening before.

"Try it," said Clem, with a grin; "you're welcome." His confidence in the machine was not misplaced. The big cylinder swallowed, nonchalantly, all the wheat the men could throw into it and seemed always to be calling for more.

"That machine is sure some feeder, Clem," said the farmer for whom they were threshing. "Never saw one that would take so much wheat; it's turning out good too."

Clem was a good engineer; and no better separator man than his father ever looked into a cylinder. In addition to that their rig was not equalled in that country. But they had a task ahead of them—three days' work to do in two, and possibly less. Big Ike was sure to speed his crew, even though he had the lead of a day. He was the only competitor that was likely to prove dangerous.

Mr. Ward's crew had three sets to make, including the one they were now on. Ordinarily it would require three days, but they planned by exerting themselves to the utmost to finish in two. The set they were on would require until the middle of the afternoon, the pulling to and threshing of the second would involve the remainder of the day, while there was a full day's work at the third.

Clem watched the diminishing number of shocks closely. They were disappearing at an unusually rapid rate, but to him it seemed exactly the reverse. By the middle of the afternoon, however, the last bundle was thrown into the feeder; barely had the separator cleared itself before Clem threw off the belt, coupled up and rumbled down the road to the second set.

They finished the second set by working until ten o'clock in the evening. Then, after eating, Clem and his father returned to the engine and prepared to pull to the last set in order to get an early start on the following morning.

"You're not going to pull tonight, are you?" asked the owner of the farm.

"Yes, Got to," was Clem's cheerful reply. "We've got to finish that job of Mr. Brown's tomorrow."

"Say, I'd like to know why you fellows are in such a thundering hurry! I was past Big Ike's rig this afternoon as I came from town, and he sure is sending that old rig of his for all it's worth. Says he'll finish by four or take off the governor belt and let her run."

"That's why we've got to go some," replied Clem, and he explained the situation.

"Sam Hill!" said the farmer, as he watched the rig rumble away.

The next morning Clem approached the farmer for whom they were to thresh. "Mr. Brown," he began, "we've got to finish this set by four o'clock. Will you put on a couple of extra haulers?"

"By four o'clock!" exclaimed the man, who was an eccentric old fellow. "Great Scott, boy! I didn't expect you to finish until tomorrow."

"But we've got to beat Big Ike, over there." And he again explained the situation.

"We'll beat him or break a hamstring!" cried the old man. "I'll keep the men in water!" And off he dashed to his buggy, in which he hauled water to the field for the men.

THE men worked with a will, and with the two additional helpers they kept the big mouth of the separator full. Indeed, they kept it so full that occasionally the steady drone of the cylinder decreased. Clem, who



Crack! Crack! Crack! The big engine smashed the rails like paper

Sugarland

By NORRELL GREGORY

Illustrated by HEMAN FAY

"Guess not, let's go back to the house."

Across the field came the short blasts from Big Ike's machine, calling for, "More Wheat! More Wheat! More Wheat!" Both carefully refrained from noticing it.

"I wish that we had asked them to send those repairs by express," said Clem earnestly. "They'll send them by freight, and it'll take a week. Today's Thursday, and they can't get here before Saturday at the earliest."

"No use to wish, son," said Mr. Ward with a note of discouragement in his voice.

That evening about eight o'clock Clem was sitting on the doorstep, brooding, when a buggy stopped at the gate.

"That you, Clem?" said a neighbor. "I was in town this afternoon, and the station agent said a telegram had just come in for you, and he asked me to bring it out." He handed Clem an envelope.

"Much obliged, George," said the boy. "Maybe I can favor you some day."

"Don't mention it, Clem," returned the man as he drove away.

CLEM tore open the envelope on the way to the house. As he came into the light he took in the contents at a glance. It was

from the machine company and read: "Shipped goods by express, knowing value of time at this season. Should arrive fourteenth."

Clem dashed into the house. "What day of the month is this?" he cried to his father.

"Why—the fourteenth; but what's all this noise about?"

"Read that!" Clem handed him the telegram and dashed out. Presently the sputtering of his motorcycle shattered the air and then rose to a roar as he shot down the road toward town.

When the shaft of light from his headlight reappeared, coming from town, it fell upon Mr. Ward, waiting at the roadside near the place where the machine was.

Clem drew up and threw a bag on the ground that clinked of steel. "I got it!" he cried.

They proceeded directly to the machine and by the rays of the lantern installed the new parts.

"I guess the old girl will be on her feet again tomorrow," said Clem as he patted the new neatly repaired drum, "but we've got to hustle. We've three regular days' work here, and Big Ike has only two."

"We'll have to start early," said his

was always watchful, opened the throttle of the engine a little wider and smiled as the drone rose again to its accustomed note.

The old farmer drove up with his horse in a gallop. "Great Scott!" he ejaculated. "The boys are absorbing a powerful lot of water!"

He unloaded the two big jugs of water, replaced them with two empty ones and drove away at a gallop.

Work as hard as they might, by noon the field was only half finished. The old farmer put two more wagons in the field; he also kept six men pitching to the machine.

"Guess we'll have to take out the dividing board, Dad," said Clem with a grin. "I've tied down the safety valve."

The dividing board kept an oversupply of bundles from entering the cylinder. It was removed, and the men who sacked the grain were all but overwhelmed by the deluge that poured out.

Mr. Ward came round where Clem was firing. "Takes some coal to keep up steam," said Clem, wiping his brow, "but that separator is a dandy. I don't believe that enough men could get round it to choke it down."

His father smiled. "Seems as if this engine is doing pretty well too. How's your water?"

"It's getting pretty low," replied Clem seriously. "I've been expecting the tank for half an hour."

Mr. Ward looked at the gauge. "I should say it is!" he exclaimed. "There isn't a sixteenth of an inch of water showing. Don't hold out too long, Clem; there have been many accidents of this kind. If the tank doesn't arrive in a quarter of an hour, shut down."

"All right, Dad, but I hate to be beaten now," he said as he stepped to the whistle and began signaling for water.

Just then the old farmer drove up. "What's the matter? Isn't your tanker showing up?"

"No," said Clem ruefully, "and I'll have to shut down pretty soon unless he does." And he pointed to the gauge.

"Great Scott! I'll get him." And off the old man went at a mad gallop in search of the water-hauler.

Clem went to the tool wagon, secured two jacks and proceeded to jack up the fore part of the engine. The purpose of this was to keep as much water round the walls of the fire box as possible.

Mr. Ward came round about fifteen minutes later. "Hasn't the water got here yet?"

"No. I'll hold out just five minutes more, and then if he doesn't come I'll shut down."

At the expiration of five minutes Clem was just reaching for the throttle when the

water wagon appeared with the old farmer driving.

"Much obliged, Mr. Brown," he said. "You're just in time. What was the matter with the tanker?"

"It wasn't all his fault—I saw somebody that looked a lot like Big Ike going over the hill as I came up. One of the boys that has just come from there says he's broke a



swinger and will lose about an hour—guess he wanted to stop you awhile too."

"Well, I guess he won't this time," said Clem grimly, as he admitted the water very slowly into the boiler.

For the next two hours the big separator devoured the wheat in monster mouthfuls. Clem kept a heavy head of steam and never allowed the motion to slacken. Just before four o'clock the men tossed the last bundle into the cylinder and Clem shut down the engine and climbed upon the separator, where his father stood.

"Two thousand bushels!" exclaimed Clem, pointing to the grain tally. "That's going some; but I expect we'd better get out of here. I'm looking for Big Ike to come over the hill any time."

He ran back to the engine, coupled up to the separator and pulled out on the road that led to Sugarland. This road forked about an eighth of a mile beyond their present position; the two forks came together again only a few rods from the state road that formed the southern boundary of Sugarland.

One of the roads was more than a mile shorter, but the other was more level.

"Dad," said Clem as his father climbed up beside him and took the steering wheel, "which road shall we take?"

"Which do you say?" asked his father.

"Well, the lower is more than a mile farther, but the upper fork is rough and hilly, and I believe we will make time by taking the lower fork."

"I think so too," replied his father.

Knowing that Big Ike still had a chance of taking the upper road and perhaps beating them, Clem kept the engine hot—"popping off"—a great part of the time. The speed—if a traction engine has speed—they made was remarkable. About eight miles down the road a short but very steep hill curved down to a bridge directly at its foot. Travelers descending the hill could not see the bridge until they rounded the curve within a few feet of it.

Clem had the engine "wide open" and rolled down the slope round the curve rapidly. His attention was focused on the engine, while his father, who was steering, watched the road.

"Reverse her, Clem!" he suddenly shouted.

Clem snatched the lever back and set the engine in reverse. The shock of the sudden reverse was so violent and the strain so great that for a second or two it seemed that the gears would be stripped. However, the engine halted a scant yard from the bridge. They both jumped down to examine the bridge.

"That's queer," said Mr. Ward. "George Cohan was over this road an hour ago and said nothing about this."

Clem pointed to one of the supports, which bore evidence of the hasty use of an axe. "Looks to me as if it had been knocked down purposely," he said.

They crossed the ditch, in which less than a foot of water was running.

"Look here, Dad," said Clem, pointing to the imprint left by a light automobile tire, which had been turned round at that point.

"Whoever did it came in a car."

"Perhaps the car came after the bridge was down and had to turn round."

"Maybe," assented Clem, "but they could have crossed a little below. And what do you think of this?" He stooped and picked up a heavy leather glove, black with grease and oil. "Nobody but some one that works round an engine has such a glove as this."

"You're right, but let's try to get out. We can't back up the hill."

"I believe we can shovel the banks down and fill the ditch with fence rails and get across."

"Good idea; we'll try it anyway."

THEY worked like beavers and in less than an hour had the ditch well filled with rails and cemented with moist soil. Clem

climbed upon the engine, guided it carefully down upon the rails and then opened the throttle to its fullest extent.

"Crack! Crack! Crack! The big engine smashed the rails like paper, but it went over, dragging the separator after it. When they were safely across Clem drew a deep breath of relief. His father took the wheel, and they moved on.

They were within a quarter of a mile of the point at which the upper and the lower road joined when Clem, who had been watching the other road for some time, pointed to a burst of smoke that suddenly appeared over a small hill.

"Big Ike!" he exclaimed.

"And he is two hundred yards nearer the line than we are, and has a down grade," said his father.

Sure enough, the rig that appeared was Big Ike's; he had them hopelessly beaten, it appeared.

"He couldn't have done it if his dirty tricks hadn't helped him," said Clem desparingly, sitting down on a coal box.

Big Ike was within twenty rods of the line where the upper and the lower roads came together when a large load of hay approached him. The road was narrow, but there was sufficient room to allow them to pass, by careful driving. Big Ike had now seen Clem and Mr. Ward, and he had even waved his hand sardonically. As the hayrack pulled toward him he began to shout to the driver to pull out of the way. Big Ike was "hogging the road"; he seemed determined not to slacken his pace or to pull out to the side. Apparently he expected the hay wagon to turn and go back to the state highway. But the team was young, and the two horses suddenly became frightened at the iron monster puffing and rumbling toward them. The driver tried to urge them on, but, whirling suddenly to the right, they upset the load of hay squarely in the middle of the road.

Big Ike yelled loudly and shut down his engine just in time to prevent a collision. For a moment he seemed about to attempt to drive his machine round the wreck, but, seeing the futility of such a move, he stood scowling in his tracks and watched Clem and Mr. Ward drive over the line into the state road.

The earnings of the Wards that season far exceeded the expectations that Clem had entertained at the outset, but what pleased father and son still more was that their big new machine did such excellent service in those rich wheat fields that the farmers of Sugarland unanimously agreed to give them the contract for succeeding years as long as they wanted it.

politely. "It's just living away off and not knowing people that makes you think so."

"But I do know people," objected Sarah. "I prepared for college at Marston Hall, with Louise Ware and Jo Kent—they're both in Porter with you—and Anabel Wright, our class president, and lots of other prominent freshmen and sophomores. Oh, I know girls enough here, but—" Sarah turned her impassive face suddenly to the window. "I'm not wanted," she went on dully. "I'm never wanted. I'm like the sparrow you drove away from the fudge crumbs I scattered on the roof outside our window. Nobody likes me around."

K. Blake had a more than average aversion to wearing one's heart on one's sleeve. But just on that account did she pity Sarah all the more. The poor thing must be desperately unhappy to be willing to admit it so brazenly!

"Nonsense, Sarah!" she began briskly. "The reason I—and most people—dislike English sparrows is because they're so quarrelsome—always driving off other birds. You're not like that."

"Yes, I am," persisted Sarah dolefully. "I mean about not being wanted. Just like a sparrow!"

K. looked at the tall, ungainly Sarah, and her little brown face rippled with sudden mirth. "Well," she suggested gayly, "sparrows go in flocks. If you are one, you'd better find some more to flock with."

"What—what do you mean?" demanded Sarah doggedly.

K. gathered up her bags, as the train whistled for the Junction. "My cousin, Sally Richards, told me," she explained, "that the best way to succeed here at Harding is to choose a special line and concentrate on it—do something well enough so

"Sparrow"

By MARGARET WARDE

she had dared even hope for dropped into her lap: a single in Porter. K. said a hasty good-by to the drab boarding-house and the dull roommate, with whom she had scarcely exchanged a real idea, and in twenty-four hours was settled in Porter and as much at home there as if her three weeks "on temp" had never been.

K. actually forgot her forlorn roommate and until she was starting home for the Christmas holidays never saw or thought of her again.

The train to the Junction was crowded. It was only sensible, as well as kindly, for K. to drop into the first available seat, half of which was occupied by Sarah Sims, her ex-roommate. Sarah smiled dourly as she made a place for K. and her multifarious belongings.

"I thought you'd forgotten me," she said. "I hear you've got very popular."

"I've been very busy," amended K., conscience-smitten by the truth in Sarah's first statement. "I love it on campus. Are you on yet?"

Sarah shook her head. "I didn't get any assignment that I wanted, so I'm going to stay where I am. She's given me that room to myself and put in an electric stove to heat it better."

"That helps," said K. gayly. "But it's so far away! Don't you think you'd get acquainted faster and have more fun if you moved? Honestly—I made a great fuss about getting into Porter, but all the dorms



Sarah sighed heavily, "You said you'd help me." "K." had privately decided that Sarah was the dullest, most uninteresting creature she had ever met

are fine—splendid girls in every one. It's just thrilling to be right in the center of things!"

"It is—for you," said Sarah Sims. "I'm different."

"Oh, no, you're not," protested K.

you'll be noticed for it. Well now, don't sit around thinking nobody likes you—not for another minute! Decide this vacation what is going to be your line and when you get back I'll try—to help you get into it," promised K., weakening a little as she tried to think of Sarah Sims making a hit at anything that Harding would applaud or admire.

But Sarah insisted on a perfectly definite statement. "You mean you honestly think that, if I pick out something to do and then do it, I can be in things here, the way most of the girls are?" she demanded. "I don't mean be as popular as you are, K., but not be always one by myself—a lonely sparrow."

"I certainly do think so," said K. What else could she say, with Sarah's great eyes, full of tragic loneliness, staring into hers?

K. CAME back to Harding on the last possible train, and found Sarah Sims, dour but determined, sitting on a trunk in the corridor waiting for her.

"I figured you'd have to come on the eight-five," she announced, "as long as you didn't come on the six. I've decided on my specialty. I'm going in for basketball."

"Why, that's a fine choice," said K. heartily. "I wish I were any good at it."

Sarah glanced at her appraisingly. "You're not at all the right build," she decided swiftly. "Now I'm tall and strong and fairly quick. I came back a day early, to have a good chance to practice throwing baskets." She sighed. "I've practiced four hours today, and I don't think I shall ever be much good at that,—can't gauge distances accurately enough,—so I'd just better play guard." She paused and looked inquiringly at K., as if she expected something quite definite of her.

K., who had been giving only half her mind to Sarah and the rest to the noisy after-Christmas reunions going on in the halls, realized with a start that she must say something. "Play guard—oh, yes!" she agreed politely. "Playing guard always seems the most fun of all to me. You can be as mean and bothersome and teasing as you like, for once, and it's all a part of the game."

Sarah gathered herself up for departure. "Then, if you'd just speak to Jo Kent," she said. "And do you know a Jane Foster or a Martha West? Those three are out for the team, I've heard."

"I know them all," K. told her, "but—what do you want me to tell them? Miss Bates, the gym instructor, chooses the team from the best players. Jo and Jane and Mart haven't anything to do about it. And I certainly haven't."

Sarah sighed heavily. "Oh, all right, only—you said you'd help me, and you know it does help, when you're the kind that's never wanted, to have even one friend willing to put in a good word for you."

K., thoroughly exasperated, promised to introduce Sarah to Jane and Martha and to tell Jo Kent that the other Marston Hall girl was "out" for the team.

" Didn't know Sarah Sims was athletic," was Jo's comment. "Can't remember that she ever did anything at Marston except sit around and mope."

"Then isn't it fine if she's getting a different idea of life here?" said K. "I'm afraid I wasn't—extra nice to her those three weeks we roomed together. Anything you can do, Jo, to help along her game, please do, and if I can ever do anything just tell me."

Before anyone realized what was happening, one of the seven coveted places on the freshman team had been given to Sarah Sims, "outsider," and Martha West, who had calmly counted on making the team, as she had made everything else she wanted at Harding, found herself relegated to the subs.

K. Blake, who thoroughly believed in passing around the good things of life, was delighted at Sarah's triumph. Also she was relieved. But presently other troubles began for K.

"I wish," Jo Kent told her irritably, "you'd explain to your athletic protégé that hounding isn't an essential part of guarding. She's the most unpleasant guard I ever had anything to do with—she sticks like a burr, she pricks like a burr, and then she smiles the meanest smile! All the girls say she just spoils the fun of practice. Oh, she's good,—no doubt,—but they don't want her."

"If she does things she shouldn't," said K., "don't they count as fouls against her?"

"No!" blurted out Jo angrily. "She never makes a foul! Knows the rules backwards and keeps 'em. It's her manner, K., that we can't stand—her mean, domineering, selfish, disagreeable way of getting the best of us."

Ruefully K. remembered her joking remark to Sarah about the advantages of playing guard. Next day, when Sarah came wanting her to go to the gymnasium, she referred to it.

"You have to be very tactful, don't you, when you play guard," she began. "It must make a nervous player wild to have an elbow poking her in the ribs every minute, and an

began, "when you talked to me about the different kinds of sparrows? Well, I can't thank you enough. Right then and there you gave me my new idea for a specialty, and this time I'm sure it's a good one—one that I can stick to. I'm going to be a song sparrow."

"You mean—you can sing?" asked K. blankly. Somehow it was hard to associate

that a word from her might sway the tempestuous Glee Club leader in Sarah's favor. So she said the word, and thereafter Babette and Sarah both held her responsible for all the Glee Club's troubles. This time Sarah honestly tried to be agreeable, but she always sang like a soloist; she snatched at every possible chance to sing alone, and she took encores quite regardless of the hour or Babette's rulings.

"K., won't you tell S. Sims that a glee club isn't a chance to show off?" Babette would demand blandly. Or, "K., that Sims person can sing, but she can't cooperate. Jo Kent says you knew she was a tartar, so why did you unload her on me?"

K. hated "fusses." She couldn't imagine pushing herself forward as deliberately—or as stupidly—as Sarah did, or, like Babette, dumping her troubles on other people. And yet she couldn't bear to tell Babette bluntly to make her own complaints, or Sarah to stand on her own feet. As the year rolled on to spring and the date of the annual Glee Club concert approached, Babette was unusually nervous and complaining, and Sarah continually in search of advice or help or sympathy. Poor K. felt herself being crushed small and limp between them.

The week before the concert the Carter twins rushed in on her one afternoon.

"Come for arbutus!" the Big Twin ordered loudly.

"In Ursula Craven's dad's big c—" added the little one, pausing in midword, as her eyes took in, first, the confusion of K.'s usually immaculate single, and then the woe-begone, teary aspect of its owner.

"Oh, 'scuse us for bursting in your door, K.," the Big Twin apologized briskly. "But it's a supper party too, all regardless, on Ursula's dad, and we knew a 'don't disturb' sign and a 'can't-come-to-the-telephone' order wouldn't stand in the face of all that joyousness."

K. wiped her eyes and smiled at them wanly. "Sorry, twins," she said, "but I've got a 'written' tomorrow to bone up for, and all this"—she waved at the enveloping billows of dull green crepe and chiffon—"has to be a dress by the day after. And I'm slow at both jobs; my brain is wuzzy, and my fingers are all thumbs."

"Oh, what a shame, K.!" The Big Twin glowered glumly at the green billows. "Are you going to wear all that fluff? It doesn't look like you."

"Of course not!" snapped K. "It's—well, you see, Sarah Sims's dress for the Glee Club concert was lost in the mails, and I'm helping her make another."

"Miss Easy Mark!" sniffed the Small Twin. "Helping is good!"

"Well," K. defended herself, "she naturally wants to look her best, because Madame Lange's coming to hear them—the great contralto who's always discovering voices and helping along young singers. And Sarah can't make a dress that's fit to wear. Well, I'm afraid neither can I—for Sarah!" concluded K. dismally.

"Then dump all this stuff on a dressmaker, where it belongs," advised the Big Twin briskly.

"Sarah can't afford that," sighed K. "Besides, it's nearly done now."

"Then let Sarah finish it," ordered the Small Twin emphatically. "Or, if she prefers, let her wear her old clothes. Lange won't notice one little Glee Club girl. We twins know all about her! She's coming up to see the college—to decide whether it's the place for her favorite niece to be educated to the queen's taste. Ursula isn't sure that she'll even go to that old concert."

"Ursula's not sure?" queried K.

"Didn't you know," explained the Big Twin, "that the Cravens have the place next to Madame's at Seal Cove and see a lot of her every summer? They all adore her. That's why Ursula's dad is up here—to be on hand to convey Madame's invaluable throat safe in a cushiony limousine from point to point while Ursula shows off Harding to her."

"I see!" K. laughed grimly. "The Glee Club—or Sarah anyhow—thinks Madame's come on purpose to hear their concert. And Sarah says that when she sees Madame's face during her solo she'll know whether or not she can sing."

"And what if she sees she can't?" asked the Small Twin acidly.

K. shrugged. "I don't know. Drop her music, I suppose, and go out for something new, possibly Press Board. Oh, you needn't laugh, twins! Her English prof, not knowing about her musical ability, has been urging her to try. He says she's just the right kind to succeed in the newspaper game."



"I say," began the Big Twin slowly, "She ought to leave college. She's not—adapted to college."

arm in her way every time she grabs for the ball."

Sarah sighed. "That's so. And all the players on our teams seem to be nervous. I—I wish I'd decided on some other kind of sparrow to be, K. All the girls on the team are popular and prominent, and they're all friends. I'm one alone by myself—always left out of the talk. I've never felt so sure I wasn't wanted as I do at basketball practices."

"If you really don't enjoy it," suggested K. doubtfully, "I suppose you could resign."

Sarah looked at her gratefully. "Really?" she said. "You wouldn't feel hurt? After all you've done for me, I wouldn't stop playing unless you thoroughly approved."

Flushed with annoyance, K. muttered that this was entirely Sarah's affair.

"Then I'll resign right away," announced Sarah, "and rest. I'm worn out with all the unaccustomed exercise I've had. But it's been well worth while," she went on eagerly, "because I've found that, if I try, I can do things—all kinds of things. Maybe after a while I'll even learn how to be—wanted. When I've chosen my new specialty—I see now that there are lots of choices in this college, and I shall be careful next time to choose wisely—then I'll come to you and you'll help me again, won't you?"

Weakly K. promised; it was so hard to resist Sarah's sad, pleading eyes, so small and selfish not to encourage Sarah's newly born ambitions.

BUT early in the fall of sophomore year Sarah turned up again: the same melancholy Sarah, but with the transforming light of eager determination burning once more in her big eyes.

"You know that day on the train," she

Sarah Sims with anything as lovely as music.

Sarah nodded. "I've always known I had a voice, and this summer I decided to cultivate it. My father thought vocal lessons were pretty expensive on top of all my college bills, but I told him what you said about success depending on a specialty, and he finally gave in. I took a lesson every day with a fine teacher, and I made wonderful progress. I don't mean to seem conceited, K., but that's what my teacher said—that and a lot more. And the music department here is just as enthusiastic about me. I've joined the choir, and tomorrow when they have tryouts for Glee Club I'm going up for that."

"Why, this is splendid, Sarah!" cried K. heartily.

Sarah sighed. "I've got talents enough," she said bitterly. "But I don't make friends. You're my only one in this whole college. By the way, Babette Wynne, the Glee Club leader, rooms here, doesn't she? Some time before tomorrow afternoon would you tell her that your little song sparrow is trying out for soprano? I do want to have some success and happiness here at college," said Sarah, fixing K. with her tragic eyes, "and I'm afraid I shan't sing my best at the try-out, because I know they want pretty girls for their club."

"See here, Sarah," began K. daringly, "maybe there is something in your idea. Of course the looks of the stage does help the success of their concerts. You be sure to wear that blue dress that I like, tomorrow, and do your hair the way I showed you last fall."

"I will," Sarah promised eagerly and went off to practice trills.

K. hated to speak to Babette, but she was afraid not to, since she knew perfectly well

"I know what I wish! I wish she'd leave college!" sputtered the Little Twin. "She may be musical and literary and athletic, but I don't like her. She's always bothering you and taking up your time and spoiling your fun."

The Big Twin stared solemnly at her blustery little sister. Then she looked at K., and then at the offending billows of greenery. "I say," she began slowly, "that's—an idea. She ought to leave college. She's not adapted to college. She ought—I think we can manage it," she ended briskly.

"Sure, we can," agreed the Little Twin, with the uncanny grasp of the situation that prevailed between the sisters.

"Now, twins," began K., severely, "you mustn't be mean to poor Sarah. She's a forlorn soul. *Things* mean a lot to her because she's so alone—doesn't make friends."

"Oh, don't you worry," drawled the Big Twin complacently. "Your darling Sarah will jump for joy, if all goes as I plan. She can sing, you know, and she doesn't belong in college—too self-centered. Now come along, little sister, or we'll be late for the splendiferous party."

SARAH SIMS spent most of the afternoon fascinatingly watching K. manipulate green billows into the most becoming dress

Sarah had ever owned. About supper time she departed, leaving the dress for K. to add a few finishing touches. But at eight she bounced in again, in a state of breathless excitement.

"Lange has offered me an audition!" she gasped. "Think of it, I! Offered it! Why, I must be famous!"

"Probably you are," said K. wearily. "But what is it you said she'd offered you?"

"An audition—a chance to sing for her," explained Sarah. "Tomorrow at four. It's to be in the little music hall, and Professor Parsons has promised to play my accompaniments." She flung her arms around K. "Oh, you darling! You've done lovely things for me before, but this is just beyond everything."

K. detested thanks and hugs equally. "I didn't do anything," she insisted crossly, backing away from Sarah's effervescent rapture. "How could I?"

Sarah beamed at her. "The Carter twins told me all about it," she announced coyly.

"Told you what?" snapped K.

"That the offer came through you. Oh, Ursula is the one who knows Madame, and it was Ursula's father who wired Madame to make final arrangements. But it was you they did it for—you who arranged it. The

twins let out your secret, K., and your little song sparrow just must chirp a thank you."

"Those twins are—crazy," said K., and then she sighed. "If you want the green dress for afternoon, Sarah, instead of evening, you try it on again, and I'll pin in the long sleeves."

Sarah insisted that K. should come to the

audition, and Madame insisted that the twins and Ursula must come. "I am here to be amus," she said, "and if you insist that I hear your song bird, you can at least let my poor eyes rest on lively young ones, while I listen. Also, the song bird will do better with an audience of those who love her so that they sacrifice to her the precious moments of my small holiday."

The twins exchanged guilty glances and proceeded to be as amusing as only they knew how.

But before Sarah had finished her first song Madame had forgotten them and Ursula and her "small holiday."

In the middle of the third song Madame let go her chair and ran and hugged Sarah and kissed Professor Parsons on both cheeks. "My dear twin! call you the song sparrow," she told Sarah. "You are not that; you are a white-throat sparrow. You have but three notes now, but those are of surpassing love-

liness. Go home, dear child, and pack a bag and come with me to my country house, and we will listen to the white-throats together, while I shall tell you all I know and direct you where to go and what to do. But first say farewell to this college where you are so well below. It is to educate young ladies and not song birds, and you have no time to spend here."

Four years later K. Blake, the Carter twins, Ursula Craven and Madame Lange sat in the Cravens' box at the Metropolitan and watched Sarah Sparrow (née Sims) make her début in America.

"She is a great voice," said Madame, as the curtain dropped, amid bravos, on the first act, "and she will go far. But why you all love her so dearly I cannot understand. Of all the girls I have help she alone is the old man of the sea on my back always."

"Madame," said the Little Twin solemnly, "your back is broad. K. Blake here was too small to carry such a load through college. It was to rescue K. that we dumped Sarah on you. It was K., not Sarah, that we loved."

Madame smiled benignly at K. "Ah, that I can well understand!" she cried. "And, as this naughty twin has said, my back is broad! But it has ache at times with that Sparrow."

which he might hold the injured one steady! The left was fully occupied in helping his trembling legs. Just how he managed to get out into the sunshine he could never tell, but at last he was there and edging slowly along to his camp.

When he at last sank upon the short log that he used as a seat, he was sobbing with pain and exhaustion. But his courage was still high, and he tried to stop the convulsive movements of his throat and chest. He succeeded in a few moments and looked about him.

"The first thing is to get this arm set and in a sling," he said to himself and began his preparations. First he got his belt axe and awkwardly hacked some stiff bark from the side of a log. Two strips of this he split to the right width and cut the proper length. It was slow work. He went about his further tasks, talking to himself whimsically. He found a strap on the pack saddle and another round his extra drills. With hand and teeth he tore a shirt into strips and the leg off a pair of underdrawers. Then he put one strap ready with the cloth beside a little tree and slipped the other strap over his right wrist. He tied the strap round the tree, slid into a sitting position with his right foot against the tree, gritted his teeth and pulled. With his left hand clasping the broken arm and his fingers working nimbly, he gently pressed the broken ends into place. The pain sweat dripped from his face, and his throat made little gurgling sounds of agony, but he persisted until his fingers told him that the broken bone had made a smooth, even joining. Then he reached for his rough splint and fainted dead away.

His first thought when he recovered was to wonder if the bone had again slipped out of place, but he found to his joy that it had not. Putting the strips of bark and the bandages in position he strapped the splint and made a rough sling. After resting he went over his body, head and legs, down by the creek, and washed the wounds, bandaging them as well as he could.

It was noon when he had finished his repair work and sat on the creek bank leaning against a tree. He studied his situation thoughtfully, realizing that in his weakened condition he could neither climb over the pass nor walk the ninety miles to where help could be found at the end of the other trail. He divided his scanty supply of food into eight small portions, and then he rested until the next morning.

When morning came he was feverish and so lame that he could move only with the greatest difficulty, but he gritted his strong, white teeth and vowed that he would not give up. He made his way to the stream, bathed his head and face and drank great quantities of cold water. All that day he kept close by the water and used it freely in both ways. On the following day his fever had abated somewhat, and he continued the treatment.

When four days had elapsed since the accident he crawled into his blankets in the little tent, knowing that he must do something the next day if he wanted to get out alive. There was a little food left—his fever had kept him from eating one ration, and he had split his two meals a day on the last

Wade's Tough Luck

By E. E. HARRIMAN

Illustrated by J. BURTON



Wade realized that in his weakened condition he could neither climb over the pass nor walk the ninety miles

two days and then planned to put all his dynamite into three shots, each one bigger than any he had fired in the past. He drilled the holes deep and carefully, slit the sticks, inserted the caps and fuse, pushed the charges home with a stick and tamped them with extra care.

When all three charges were ready for the shot, he carried his tools back a short distance, took a candle from where it stood in its own grease on a little shelf, lighted two fuses and held the candle to the third. It began to burn exactly as had the other two, and he started quickly for the end of the tunnel. His coat lay on the rock floor about fifteen feet from the breast where he had planted the three shots, and he stooped to pick it up.

As he lifted the coat and began to straighten his back he heard a roar behind him, a blast of wind swept him off his feet, and he was blown along the rough rock floor like a scrap of paper. He felt the gouge of its many points and ridges, the scraping, tearing grip of its surface on his flesh, and then he forgot light and life and everything else.

Once in a long, long while a miner finds a piece of defective fuse—a little section in the middle of a long length of perfect fuse, that instead of burning slowly, flashes along the whole length. Wade had found one.

He had been lying there a long time when he came drifting back to consciousness; it seemed to him that he was floating in a great sea of pain. Then he found that his right arm ached differently from the rest of his body, and he concluded that the bone must be broken. Even as he became sure of it he went floating off again where nothing matters.

He came back to the tunnel again and again, each time feeling his head swelling and relaxing like the bag bellows of an African native blacksmith. He lay with his cheek on the rock and his face toward the end of the tunnel. Worn out by pain and exhaustion, he slept after a time, little naps of a few minutes, broken by intervals of throbbing agony.

HIS right arm hung limp, and he found the bone was broken midway in the upper arm. With his left hand he explored his head, finding several deep, jagged gashes and a multitude of abrasions. His clothes hung in tatters, literally blown to strings. Both legs were bruised and skinned badly, but he gave thanks that the bones were whole. In weakness and suffering he lifted his body and got upon his knees.

The dangling arm would swing and make the broken bone grate in spite of all he could do. How he did wish for a third arm with

day. He could manage two days on the two rations, but he would be lank at the end.

When he crawled out in the morning he was still studying ways and means and had not decided that he had any sure way of winning, yet he could not give up. He ate half a ration and sat in his usual seat near the stream to think. His eyes roamed idly over the rocks and water and off among the great, friendly trees. He had always loved the forest and mountains. Even now when they ringed him with their barrier, shutting out help, he felt a stirring of pride in their beauty. His eyes came back from the trees to the stream and followed its windings. Suddenly he leaned forward with a low cry and stared eagerly at the trees across the creek.

IN 1774 England declared an embargo on the shipping of Boston, and the custom house was removed to Salem, thereby giving a special impulse to the commerce of that port. In 1775 came the war of the Revolution, and everything afloat and along the coast met changed conditions.

So it happened that the ribs and keel of a vessel begun in a Boston yard in '74 remained as a skeleton for several years. Then her owners, who were for the most part ship carpenters, said, "We will finish her for a privateer and gather profit by capture." They altered her lines somewhat, made her sharper in the bow and named her the Speedy. But again delays came, and when the war closed the Speedy was still untried and privateering was over. Then at last she was completed, sold to Salem men, for sixteen dollars a ton, and outfitted for a venture to Calcutta.

It was a genuine "venture" to send the little ship so far to a market so little known and to ports where the Stars and Stripes had no traditions of power behind it. But what good guessing, good judgment and courage could do was done. Tom Scanlan was second mate. He was young for the place, and this was his first deep-water voyage. He eagerly proposed to himself, however, to do his best and to make his way up until he was "Captain" Scanlan.

The Speedy had been out thirty-two days by the log, and they were running down toward the southern limit of the trade winds when one morning there was a call of "Sail ho!" and the lookout made out a vessel ahead of them, a little on the weather bow.

"We've had the whole Atlantic to ourselves for more than a month," observed the captain, "and I'm glad to see somebody. Brace the yards a little, Mr. Scanlan. We'll come up a couple of points and run within hail."

The Speedy came up to the wind till the stranger bore nearly straight ahead, then the captain went forward to the bow to get a better chance to see the other vessel, while Tom went aloft to the lee fore yard to see about a frayed leech line.

The day was fine, and the Speedy, taking the wind now almost abeam, was doing her prettiest. The seas, large enough to curl and break with a frothing of foam, came chasing down from the northeast; the sails were pressed firm and full so that the ship no more than swayed gently as she hastened on; schools of flying fish rose at the bow in acknowledgment of her swift pursuit, and at the stern the inrush of water tailed off in the whiteness of her wake for a long distance. Yes, it was a fine day and worth while to turn aside a little to greet a stranger in midsea. But scarcely had the captain come to his lookout when he saw a column of smoke roll up from the ship ahead and drift murkily off to leeward.

"I declare for it," he exclaimed, gazing at it, "if she's afire, we are just in the nick of time to do some good. What d'ye make her out, Mr. Scanlan?"

Tom gave attention. "Looks to me like a whaler trying out," he said. "She's hove to, I think, and don't seem to care about making a fair wind on any course."

The captain continued to look. "Yes," he said, "I guess that's so. Well, he will be glad

Note: For many years Salem trading vessels gathered wealth in the East India trade, carrying in the later years of the eighteenth century the Stars and Stripes to Bombay, Calcutta and other Asiatic ports. In the Revolutionary War hundreds of craft were captured from the British by the American marine, and probably more than half of these were taken by Salem privateers.

TEN minutes later he was hobbling on his lame legs, holding a torch in his left hand and setting fires. All about him the trees seemed to shiver and whisper to him not to endanger their lives. The wind came down to him and puffed at his torch as if eager to show what it could do with fire when it had a chance. Still he hobbled and set little fires burning in the dead leaves and always back and forth in the one line. Now the fires were running together and Wade, urging them along in one direction, stamped out the blaze that tried to creep back, urging, finally, helping it in the other way.

The creek made an ox-bow just in front of his camp, and the narrow neck was a bare hundred yards wide. Within the loop were fifteen acres of brush, a few trees and one mighty dead stub with its one branch

lifted like a fakir's arm. The track of the little fires became a continuous line two yards wide and all the fire was on the side toward the loop. Wade saw that he had won and sat down on the log by his camp and waited.

Hours went by, slow, dragging hours, and he watched the fire leap and flare, the smoke rise thick and heavy, to drift away through the tree tops, and nothing more happened. Till late in the afternoon he sat there waiting, and the smoke still rolled up. Then, when he was quivering under the tension, he saw a horse come into sight, far off down the ninety-mile trail. He could look between the trees, rising like cathedral columns, and see where that trail turned a corner four hundred yards away. He watched, and another horse followed the first one, and each horse

bore a man who was clothed in ranger garb.

The rangers rose up silently, nodded to Wade without a word, and sat impassively on their horses looking at the fire. They examined the entire loop to make sure there was no danger of the fire leaping the stream, then turned to Wade.

"How did you get bunged up like that?" asked the leader.

"Defective fuse and three shots going all at once," answered Wade.

"Well, you made us a long ride, but I reckon you were justified. A bit of quick wit, I call it, and you sure were careful. We'll camp with you till morning and then take you out. Got a good prospect there?"

"Yes, sir-ee," said Wade. "A dandy; I reckon I'll be back here working it again in about two weeks."

Tom Scanlan — Second Mate

By WALLACE E. MATHER

Illustrated by HEMAN FAY



One day when Tom was at the wheel the captain approached him in a sneaking sort of way. "What are they talking about in the fo'castle?" he asked with a sneer. "Do they want to get rid of me?"

to see us, and we'll change longitudes with him as we go by."

So they ran on, and their impression that the vessel was not on fire seemed confirmed. There were no signs of excitement, and as they came on they could see a man standing by the rail as if to speak to them.

"Captain," called Tom sharply from aloft, "she's no boats for a whaler and no whale alongside."

"Put your helm up," called the captain, turning aft at once. "We won't go too near to any uncertain craft."

The spokes of the wheel turned, and the Speedy veered away as they came up to the other, when suddenly from the stranger a broadside of cannon burst forth, and the balls went hurtling through the sails and rigging of the merchantman. With this sudden assault several things happened all at once, but they must be told one at a time; and some things that were learned afterward might as well be related now.

The strangers were pirates in a brigantine which they had laid hold of, but which proved to be a very slow sailer. Several craft had escaped them, and in hot anger with their luck they were eager to get a better vessel. So, when the Speedy came in sight, they had hove to like a whaler, hoping that she would run down to them; and then they had fired high, meaning to cripple her sailing, so that they could come aboard her. None of the balls struck vitally at the

spars or rigging; but one of them cut the foot rope on which Tom was standing, and he found himself suddenly thrown into the sea below.

He was a poor swimmer. Both ships were filled with such an uproar of excitement and shouting that no one heeded him as his ship drove on, leaving him struggling in her wake. When, however, the pirate vessel gathered way and swung slowly round after the Speedy she almost ran over him, and somebody hove him a rope and hauled him on board.

A few shots more were fired, but it was soon seen to be useless; then Tom was sent to the quarter-deck. The pirate captain who there awaited him was not at all Tom's notion of a free-booter. He was not dressed fantastically, nor did he look like pictures of Blackbeard, but was an ordinary sort of man just now in a very bad humor.

"What are you doing here?" he demanded as Tom came up.

The question was disconcerting, for there seemed no namable thing that would satisfy so abrupt a challenge, and the full story of how he came there appeared too long to offer. So Tom stood silent.

The captain grew furious. "Why don't you speak? I'll make you speak," and, turning away, he went to the break of the deck, calling out, "Lay aft here, some of you," in a way that made Tom look for trouble at once. But there was no alacrity in obeying the call,

and before anyone reached the place the captain had come to himself again.

"What ship is that?" he said.

"The Speedy," answered Tom.

"Speedy!" growled the pirate. "Everything is speedy to us. It's dogs' luck. Where were you bound?"

"To Calcutta."

"Yes, and with plenty of dollars in the money chest," said the captain, seeming to want to make the most of his disappointment. "Well," he continued, "you're the only one in luck here, and it's mighty lucky for you that we're short-handed for sailors, or you'd go overboard where you came from. Go forward and turn to. Maybe," he muttered as Tom went, "that he'll bring luck aboard with him."

The notion was fortunate for Tom. The pirate captain was superstitious and hungry for a turn in his fortunes. Tom's coming aboard was queer; they had not taken the Speedy, but they had taken Tom, and it happened to strike the pirate as a sign. Besides in all his frowsy gang of fighters there were few real sailors, and such a man was worth while.

As for turning pirate, Tom had his own reservations; but he thought his conscience would allow him to pull and haul, and he went forward as he had been ordered. At the other end of the ship his reception was much more free and easy. He was plied with questions and soon learned some things about the ship and the cruise he was now on. The vessel was the San Greve, which had come into the hands of the pirates in some atrocious way, and this was their first cruise in her. She proved to be slow partly from her build, partly from the foul of her bottom.

The crew were full of discontent. Indeed, nothing worse in that line could well be imagined than a crowd of villains, gathered in a ship, with a sense of ill luck upon them, and almost no chance to do anything. A storm even would have been a blessing, but as days passed the weather held fair and the temper of the men grew worse. Now and then a distant sail was seen, but none could be approached.

There was little discipline on the San Greve. The men acted as if they did not care whether they got into trouble with their officers or not. Even from the standpoint of the forecastle of a pirate, their captain was despicable. Mean and crafty and capable of any falsehood, he had gained his place; but it was plain that under the strain of ill success the crew would depose him if they could agree among themselves. Tom certainly had not brought luck on board with him. Yet perhaps it was not strange that the captain suspected him less than he did the others and even looked to him as a possible ally in case of trouble.

So it happened that one day when Tom was at the wheel and no one else was on the quarter-deck the captain approached him in a sneaking sort of way.

"What are they talking about in the fo'castle?" he asked with a sneer, and to Tom's look of surprise he went on. "Eh! You are not one of 'em. I know them. Do they want to get rid of me? Do they blame the ill luck on me?" His anger was rising, and he stopped to control his voice. "I know 'em. If they've had enough of me, I've had enough of them. I'll show 'em who's smart. You and I can get along fine. I'll tell you what I'm going to do, and you'll see it will be good to stand by the Old Man, thick or thin. We're near a little island where ships of our sort put in for fresh water, and cleaning. I'm going to tell 'em we're going in there. It will give 'em something to think of. We will be there in two days or maybe three. Then I'll have my turn. Then I'll breathe easy. They'll go ashore. They'll want

to—all except those I want to have on the ship,—and then the San Greve will get away and leave 'em there. D'ye see? They deserve to be marooned, every last man of 'em. You'll be one that stands by the captain and the ship; and you'll let me know how things are in the fo'castle; and, you'll say to 'em, 'Wait till we get to the island and get the ship clean before we take charge.'

"Then I'll tell you what we'll do. This ship is no good for this business. She's too slow; and, it's a bad business too. We'll go to Martinique and refit and then to the West Coast of Africa for the slave trade. That's honest, safe business, and there's gold in it too. You'll go second mate, maybe mate. I'll make it good for you, and you'll stand by the captain, thick or thin—eh!"

Fortunately, the mate came stumbling up the steps from the main deck, and there was no more to be said. Before the day was done the captain had announced that they were not far from the island, and that they would run in there. The effect was what he had hoped for. It made a diversion and seemed to offer a chance for unhindered plotting. Two days later they came to anchor in a charming tiny bay of a little islet on the windward side of the Antilles. Furthermore, the whole precious scheme of getting rid of his superfluous rascals worked; and the San Greve sailed for Martinique relieved of half of her crew and of her piracy at one stroke. She came to anchor again at some little distance from the city Fort de France.

Here the captain was to make his further arrangements for his slaving voyage, but he was distrustful of every one on board and

reluctant to leave his vessel. The mate he knew was villainous, and Tom, who was now second mate, he suspected of being still a decent man with some conscience. So he warned each privately against the other, and especially charged the first officer by no means to let Tom leave the ship alive. Then he had the cook throw pieces of pork overboard till the water was alive with sharks and called Tom to look at them. "Better not fall overboard," he said.

Tom could see nothing but to wait, hoping that something might happen to give him a chance. It was not so far to shore. He meditated slipping over the side in the night and swimming away; the still, dark water did not terrify him. Sometimes he would almost determine to try it; and then as he looked slowly, out of the black abyss, would come a gleam of light, and a phosphorescence, swaying as a great fish sways, would pull the ship to sink again in the depths or fade in the distance, and he would turn back sick from the rail.

No one was allowed on any account to come on board, except two men, who were carpenters. They were a necessity for changing the ship's hold for her new purpose. But they were closely watched, and it was the captain's design to keep them till he was ready to sail. Tom tried to appear unconcerned, but he was almost in despair. Then one day a feeling of desperation seized him. To be carried on that horrible voyage was worse than death; and in that mood he saw what he would do.

The captain himself, the carpenters and part of the men were in the hold, hastening the

work along with pounding and much noise. Watching his chance, Tom picked up an axe and, quietly slipping away, gained the deck.

The San Greve now had three boats, one having been left at the islet. The long boat, which was on chocks on the main deck, could not be very quickly moved. A quarter boat hung at the davits, and the captain's boat was in the water alongside, for he had just come from a trip ashore.

Tom went quickly to the quarter boat, and, swinging his axe with a great blow, he drove its head through the bottom of the boat. Jerking it out, he rushed for the side where the captain's boat lay. With the axe swinging in both his hands no man cared to stand in his way; and when it came down again its edge crossed the painter of the floating boat, and in an instant more he was in her and pulling furiously away.

In the hold the blows were not noticed. On deck the men were running here and there and crawling down the hatchway; it seemed a long time before the captain appeared. Then there was delay over the boat that Tom had made useless for pursuit, and by the time they began to shoot at him he was at a pretty safe distance. Indeed, the whole thing worked so well that Tom afterward came to regard it not as a desperate chance but as a perfectly easy and simple thing to do.

When he reached shore he looked back to see what was being done. The San Greve was already getting under way. The reason was plain. Tom would report her as a pirate, and piratical character was too plain to bear investigation.

"Heaven pity those carpenters!" Tom

exclaimed. "What evil thing will she do next?" What the San Greve did do, he never knew. His own case was hard enough still. He sold the boat for his immediate needs; then after a while he made his way to Jamaica, later to Halifax, and finally, partly by small coasting craft and partly afoot, he got home.

Then one day the Speedy herself came once more into Salem harbor. Jim Stiles, who was out fishing in his dory, boarded her. He shook hands with the captain; there was an instant's pause.

"Ye needn't be afraid, captain, to ask, 'How's the folks?'" he said, knowing how things go in a sailor's mind as he comes home after a long absence. "But you're coming in half-mast," and he glanced at the flag that hung mournfully halfway up the halyards in token that of those who had sailed not all had lived to come back. "Who is it?"

"Tom Scanlan," answered the captain.

"Oh!" said Jim with a kind of catch in his voice. "Is that all you've lost?"

"Yes," answered the captain somberly, "and it is enough. He was a good man."

"Where'd you lose him?"

"Overboard; getting down toward the Line. No need of it either. But I can't tell you about it now. He's gone. It will be hard to tell his folks."

Jim suddenly sat down on the square top of a bitt as if his feelings overcame him, and then he unrestrainedly broke out in laughter to the captain's surprise and indignation.

"Haul up your flag," said Jim, "Haul her up as high as ye can get it. Tom's got home ahead of ye. Ye'll meet him up to the wharf!"

NOW that another football season is here and players everywhere are trying their hardest to make their teams, it is interesting to guess what football will be like this year. It is probably true that many teams plan to use the forward pass more extensively than in the past, and without doubt not a few pretty pass plays have been diagrammed that look like world-beaters on paper, but that will run into all sorts of snags on the field of play.

The new ruling regarding the pass will demand near perfection in its execution to keep a team out of trouble. Near perfection in the passing game calls for constant practice, and if the rushing game is neglected the whole attack falls down. For, after all, a strong rushing attack constitutes the backbone of any offense.

Just how far a team can develop its passing game depends largely on the qualifications of the players. Certainly a coach makes a mistake in emphasizing an overhead attack until he is sure that his men can throw and catch well. An experienced eye will soon see who passes and who receives naturally, and then, if it is possible to fit these players into the team, a strong passing attack may be developed through careful practice.

lander's passing ability did not show until he started to work with his arm and to find out what he really could do. He played in the line until his third year in college. Then he was shifted to the back field to act as a heavy interferer. His last year he played right halfback. And he throws with his right arm. A right-handed player throws most easily from the position of left halfback. Every time that Oberlander threw from his position as right half he had to turn completely round, losing, for the fraction of a second, his view of the man to whom he threw. This was a disadvantage which would not have been imposed on Oberlander had it not been for the fact that his passing ability showed up strongly only after he had been thoroughly schooled in the assignments of the right half's work. From

Football—1926

By JACKSON L. CANNELL

Assistant Coach, Dartmouth College



Up and at 'em! This is the time of year when a backfield man dreams of a football under his arm, and an open field before him



P. & A. Photos

Without natural talent to start with a team had better not devote too much time to forward passing. It is difficult to draw the line between natural and practiced ability, but there are some players who simply cannot pass or catch well and no amount of practice would improve them to any considerable degree, while there are others whose ability in these respects is limited only by the time they devote to perfecting themselves.

A player himself can help his coach and his team by going at the thing seriously on his own. Let him get out on the field early with a teammate for several days and see honestly what he can do with his arm and hands; then, if he feels he has the stuff, let him keep working. His opportunity will come.

Not every player who practices passing will develop into an Oberlander. But Ober-

then on constant practice plus his natural ability made Oberlander the great passer he proved to be.

Once a coach finds he has the elements of a sound passing attack, he will do well to devote considerable time to perfecting this phase. And now that the rules penalize the unsuccessful pass more severely than ever, the pass, if used at all, must be thrown and handled with assurance. Confidence in execution comes only from drill—hard drill, week after week with never a let-up. The day of the haphazard, chance-taking pass has gone. The successful pass now calls for just as much timing and attention to every detail as does a hard-hitting rush play.

If teams this fall expect to rely on the forward pass merely because good passing won championships last year, and to rely on it regardless of the qualifications of the

material, we shall see some very sloppy football. In some quarters this will probably be the case. There will be passes short and long that will simply go astray, making the team that throws them look silly and spoiling the game from every angle. But we may expect to see, generally, a realization that the pass depends on a strong rushing attack and good passers and receivers, and that the new ruling demands that the pass be used effectively or not at all. This will result naturally in one type of team sticking closely to the rushing game, while the team with passing ability will show a more studied and accurate overhead attack than in past years.

It is not at all unlikely that, in spite of the high football standards of recent years, we shall see even higher-grade and faster games this fall. The capacity for development of

A big game at the Polo Grounds, New York: Washington and Jefferson gains five yards through Lafayette for a first down

the young athlete of today has not been fully measured. Some coaches, termed hard drivers, have made practice so disagreeable for their players that the men have gone stale on it. No candidate ever tired of football through over-exertion physically, but many have because of the failure of their coach so to organize and run practices as to sustain interest. Teachers of football everywhere in growing numbers support the belief that too much time cannot be spent in carefully planning each practice so as to utilize every minute spent on the field and in such a way as to maintain the players' enthusiasm for his work at its highest possible pitch. The results of a well-ordered programme of this sort prove to be amazing. The stamina and endurance of the young athlete knows no limit provided his heart is in his work, and all that is needed to keep him keen for his job is a well-developed schedule of practice that gives full play to his powers of development.

Such fundamental drills as passing, dodging, kicking, falling on and scooping up the ball can be ordered in interesting ways through the arrangement of competitions between various groups of the squad. For example, let the backs for one group compete with the linemen for another, and the ends for a third, in passing for distance. Friendly rivalry quickly springs up, and, if scores and results are accurately kept, it adds considerably to the interest in the matches.

Of course, back of it all lies hard work, but that early period when there are no games to quicken enthusiasm should be enlivened as much as possible to break the monotony of fundamental drills and bring the squad up to the opening game thoroughly schooled in starting, running, carrying the ball, passing, catching, kicking, tackling, blocking, charging, and other basic features, and still imbued with the zest and enthusiasm for the game so necessary to a winning team.

After the contests with rival elevens start, the thoughtful coach never omits fundamentals entirely, but he gradually tapers off the basic drills and works into the finer features of team play, attack, and defense.

The football season lasts ten or twelve weeks at the longest. In most schools and colleges football practice may claim no more than three hours a day, five days a week. About one hundred and eighty hours, or only fifteen full twelve-hour days, make up the time available for football rehearsals. Consideration of just how short this time is should convince anyone of the importance of making good use of every minute, of arranging practice in such detail as to keep busy every candidate in the most efficient manner from the time he steps on the field until he takes his shower. Within the past year or two more and more coaches have realized both the capacity of players for development and the value of football time. That is why we may see, generally, this fall a better and faster brand of football than ever before.

ON a Saturday morning early in May the Dunbar barn presented a busy scene. In one corner of its loft a printing office was in full operation; the type case on its high frame stood next a window; discarded woodbox turned on end supported the composing-stone, and in the cupboards beneath were racks for the rollers and shelves for cans of ink. The paper for the first issue was piled on a table near the press, now fully equipped to begin its work.

Dick was attired in a long apron, a relic of his days in the Sun office, and with sleeves rolled up was setting the type of his first issue. The copy before him rested against the case, held in place by a heavy bit of type metal tied to a string in the time-honored method employed in the Sun office. A dilapidated green eyeshade, contributed by his father, hung on a hook near by. The entire shop bore the earmarks of a professional establishment.

Important business changes had come during the last few weeks. Attracted by the success of Dick's canvass for subscriptions, other boys had made him flattering offers of partnership. After careful consideration of their fitness for the task, Phil Cranston had been selected and had acquired a half interest in the plant by the payment of four dollars and eighty-five cents in cash and further weekly payments to be made from his allowance. The paper was being launched under the firm name of "Dunbar, Cranston & Co." As yet, the third member of the firm had not been selected, but Dick had invited Jim Harding to become an honorary member of the firm, and this offer was still under consideration.

The press printed a page five and one half by seven inches, and this was to be the size of the paper. It was, therefore, necessary to print one page at a time, and, after Dick had the first page in type and had lifted with trembling fingers his first few stickfuls of type-matter to the stone, he began to feel more and more at home with his tools. Finally the first page was set and carefully locked into the chase of the press. This he did as taught by Jim Harding with great pains to have it true and square, tight enough to hold but not tight enough to bend his delicate brass column rules. As he looked at the completed page on the stone, with its shining type unsoiled by ink, the brass rules gleaming under the light, he felt the thrill of real accomplishment. He was printing an edition of one hundred and twenty-five copies, nearly one hundred of which were already paid yearly subscriptions. His plant was paid for, and an undreamed amount of his subscribers' money lay in his treasury.

The presswork proved by far the most difficult part of the undertaking at first—to get the ink evenly distributed, heavy enough to give a black impression but not thick enough to fill the type, was an art Dick had not learned. He spoiled scores of sheets of paper and secured only indifferent results, but with infinite pains he kept at it, and finally there emerged from the press the first page of the little paper, clearly and legibly printed. As he laid one printed copy on another he learned the trouble caused by "off-set," the smudging of the back of a clean sheet by the freshly printed page lying under it. It showed Dick that he was still using too much ink, and this he set about to correct. He recalled that in the Sun office this was sometimes guarded against by "inter-leaving," the laying between two printed sheets a sheet of clean blank paper. This he had to do for several issues until he learned the art of using ink.

Early the next week the little paper was complete. Dick mounted his bicycle and paid his first call at the Sun office, where a copy was laid on Jim Harding's desk. He then made a rapid circuit of the town, leaving each subscriber's copy at his door.

THE little paper received a hearty welcome. The Sun gave it a long and appreciative notice, and the right hand of fellow-

The Berkshire Boy

By MACGREGOR JENKINS

Illustrated by DUDLEY G. SUMMERS

Chapter II



Dick stood his ground, and Miller bullied. The man, with great difficulty, hoisted the press into the back of his wagon, and drove off

ship was held out by its editor to the newcomer in the local journalistic field.

It was not many weeks, however, before Dick began to realize that some of the defects in his presswork were due not so much to his inexperience as to defects in his equipment. The press could not be made to do as good work as he wanted. His old friend, the Sun foreman, dropped in on his way from work and looked it over and tinkered with it, but without success.

Just as Dick was facing this first business difficulty, he was called upon by a young man who asked him if he would be interested in the purchase of a press which he had and no longer used. Dick was, of course, interested, and the next day after school he went out and looked at it. It was a great improvement over the old press he had taken from Jim's storeroom, and, while it printed a page a trifle smaller, it was more modern and promised much better service. It was a long and tedious transaction; the owner of the press demanded what seemed to Dick an excessive price of twenty-five dollars for the press. By this time Dick had a very fair knowledge of the value of small presses from price lists of printers' supplies, and he felt sure that fifteen dollars was a fair price. He offered this amount, and it was finally grudgingly accepted by the seller. Dick bought the press on the condition that he should pay for it one week after receiving it and with the privilege of returning it if upon examination it proved unsatisfactory.

The next Saturday afternoon Dick brought it to his shop and set it up. His friend, the foreman, pronounced it a good buy at fifteen dollars, and after a long evening of hard work Dick had it in operation, and it was giving very satisfactory results.

A WEEK later Miller, the seller of the press, called for his money, and Dick offered him the fifteen dollars. Miller expressed surprise and demanded twenty-five dollars. Dick insisted that the trade was agreed upon, and that fifteen dollars was all he would pay. In the meantime Miller had

taken a hasty survey of the shop; he saw the press placed in position and cleaned and oiled ready to work. He knew Dick wanted it, so he blustered and stormed and demanded ten dollars more. Again Dick offered him the fifteen dollars, and again it was declined. After a long argument, in which Dick stood his ground and Miller bullied, the man went into the shop, took the press from its place and with great difficulty hoisted it into the back of his wagon and drove off with it.

Dick sat dejected in the twilight. There rested on the stone the first page of his next issue, now several days behind schedule on account of the installation of his new press, and in a corner lay, dismantled and useless for the present, his old one. The difficulties of business began to bear upon him. His cowardly treatment by the man made his blood boil; he knew that Miller expected him to come and beg for the press and either give him the extra ten dollars or make some compromise. This Dick determined not to do, even if he had to go back to the use of his cumbersome and inadequate press.

He went to bed that night in no good humor and woke the next morning still wondering what to do. He was in bad humor all day, and that afternoon, instead of going to his shop and putting on his apron and spending a happy hour or two there, he wandered about the streets and finally sat on a bench in the village green, disconsolate and discouraged.

As he sat there, he noticed on the side of the town hall a sign, weather-beaten and old. It was the sign indicating the law office of a distinguished citizen who had given up the practice of law and had for years been an honored member of the United States Senate. The old sign, however, was still there, and the quaint words below the name attracted his attention—"Attorney and counsellor at law." This, thought Dick, was what he needed; he needed counsel, and here was a sign offering the thing he most wanted at the moment.

He had heard hair-raising tales of the

expense of employing lawyers, and he felt great timidity in asking any advice, but the situation was acute. He made his way to the office, and as he entered he saw a young man not many years his senior sitting at an old desk.

The young man glanced up at the boy as he entered and with a friendly smile said, "Well, Mr. Editor, what can I do for you?"

Dick was astonished that he should be addressed in this way, but it put him strangely at his ease. He told his new friend a simple, straight-forward story of the press transaction.

The young man listened and then said, "Now let's be clear on two points. First, you believe honestly that fifteen dollars was the price agreed upon at the time of the purchase?"

"I know it was," said Dick.

"Very well. Now for the second point. After you took the press and Miller came for his money, you offered him the sum agreed upon and he refused it?"

"Yes," said Dick. "I offered it to him twice, and he refused it twice."

"Very well," the young man said, "I will see what can be done for you."

THREE seemed to be nothing more to be said, but Dick lingered at the door. A curious diffidence assailed him, but he suddenly realized that if he was to conduct business and wanted to be a business man he must use the direct methods of business. So he said, "One moment. I do not want you to handle this matter for me without an understanding between us as to what your charge will be. This is a business matter, and I want to pay you for your services."

The young man looked serious for a moment and said, "It is difficult to set a price, because I do not know how much time and effort it will take to adjust it; but I will agree with you that the charge will not be more than ten per cent of the amount involved."

Dick made a hasty calculation and decided that, if he could get his press back for a dollar and a half, it would be quite worth while.

What mysterious things his lawyer friend did Dick never knew, but the next afternoon a meek and gentle Miller backed up to the Dunbar barn and delivered the press. Dick had a form of receipt which his lawyer friend had prepared, and he paid Miller his fifteen dollars, and Miller signed the receipt.

Once more his labors as printer and publisher were resumed, and the next day he received his first communication addressed to "Messrs. Dunbar, Cranston & Co.," and upon opening it he found a bill from his lawyer friend for "professional services—\$1.50."

Dick took the money from his treasury, went to the office and paid the bill. As the lawyer received it and handed it back to him he said, "You have had your first business experience; you may be interested to know that this dollar and a half is the first money that I have ever earned in the practice of law. Messrs. Dunbar, Cranston & Co. have been my first clients."

Dick never dreamed then that he would be publishing and printing all the rest of his life, nor did he realize that his lawyer friend would live to be a justice of the Superior Court of his native state.

TO BE CONCLUDED NEXT WEEK.

NEXT WEEK

The first chapter of a thrilling new Indian story

"A SON OF THE NAVAHOS"

By JAMES WILLARD SCHULTZ

America's greatest living writer of Indian stories

JUST as the golden gleam of romance sparkles from every page of the past history of the Colorado River, so is the golden glow of romance thrown forward to illuminate the unwinding scroll of the future of that wonderful stream.

The Colorado River might be likened to a dragon with a head at both ends and jaws most of the way between. For almost a thousand miles of its length it runs through canyons from a quarter of a mile to a full mile in depth. At the bottom of these gorges are rapids and cataracts so wild and broken that none but specially constructed boats can be expected to survive them. Even its seaward end, the point at which almost all other rivers are open to approach, is defended by a tidal bore, a thunderous wall of tumbling water occasionally attaining a height of fifteen feet. Except that of the Hangchow River in China no other tidal bore in the world has the weight, the strength and the menace of the one guarding the mouth of the Colorado.

No other of the world's great rivers has been so difficult to find—to explore—as the Colorado River; no other will be so difficult to bind—to make a servant of man. But the courage and persistence of the first explorers were rewarded by the discovery of scenic wonders unrivaled in all the world. Now the efforts of the engineer result in a transformation of energy such as has never been wrung from a river before. The finding of the Colorado has been a fight all the way, and so will the binding be; but the reward will justify the struggle no less in the one case than in the other.

Earliest Attempts

Francisco de Ulloa, first explorer of the Gulf of California, turned back his clumsy caravels at the sight of what he described as a sea "running with great rage into the land," and sailed away, never to be heard from again. That was in 1536. Four years later Hernando de Alarcón, finding the bore at a less menacing stage, braved the dangers of it with his little fleet and reached a fairly safe anchorage. From here the river was ascended for a couple of hundred miles in small boats, but only to where the first light rapids occurred in one of the lower canyons. For the next three centuries, with the exploration and settlement of the surrounding region going on apace, few indeed were those who ventured to risk their ships in the clutches of the dreaded bore. Lieutenant Hardy, of the British navy, stranded the schooner Bruja there in 1826, only saving her at the end of a month of anxiety by the most skillful seamanship. Scarcely better was the experience of the American, Lieutenant Ives, the first scientific explorer of the Colorado.

Ives's voyage, which was made in the late fifties of the last century, completed the exploration of the Colorado from its mouth, at the head of the Gulf of California, to Black Canyon, about seventy-five miles below the foot of the Grand Canyon. But to this day the ever-flashing teeth of the tidal bore have prevented the establishment of anything like regular navigation. One of the worst accidents occurred in 1923, a few days after I had succeeded in penetrating by the newly formed channel of the Colorado to the tidal region swept by the bore. The steamer Topolobampo, after grounding on a mud bar, was assailed and torn to pieces by the roaring wave of the onrushing tide, with the loss of almost all of its crew and passengers, numbering nearly a hundred.

Many Deaths

Even the trappers and pioneering emigrants who had used the Missouri and the Platte, the Yellowstone and the Columbia, as their main highways, sheered away from the forbidding canyons of the Colorado. Most of them were ready to take the word of the Indians that the sinister chasm

Through The Dragon's Teeth

By LEWIS R. FREEMAN

Boatman of the recent U. S. Geological Survey Expedition through the Grand Canyon of the Colorado

Chapter I. HOW WHITE MEN FOUND THE COLORADO



Major J. W. Powell, first explorer of the Grand Canyon of the Colorado

of two parties, to be exact—survived to tell their experiences. In 1825 Gen. W. H. Ashley, the chief of a Missouri trading company, succeeded in running Lodore and the upper canyons of the Green with buffalo-hide-covered "bull boats." W. L. Manly with a party of ex-drovers from a California-faring wagon train traversed almost the identical stretch in 1849. Both parties felt themselves fortunate to escape with their lives, and neither, after what they had experienced in the lesser canyons above, cared to attempt the passage of the greater gorges below.

The Glen Canyon inscription, "De Julien, Mai, 1836," and the crude drawing of a boat with a mast are the only tangible evidences that any man tried to navigate the great lower chasms of the Colorado in the earlier half of the nineteenth century. But where De Julien was, where he was trying to go and what became of him are questions that the most careful researches have failed to reveal. Doubtless, like so many of the earlier and later canyon *voyageurs*, he was lost with all his outfit in some rapid.

Major Powell's Trip

Up to the time of Major Powell's first voyage in 1869 it is almost certain that no one even attempted to navigate the gorge of the Grand Canyon. If anyone did make such an attempt, he was not successful. Certainly none won through, and probably none started on that formidable venture.



Major Powell's boat, used in his second expedition. Note the high chair, in which Major Powell rode all the worst rapids

visions were carried in these compartments. The steering oar was handled by a man sitting on the after deck. Although these pioneer boats differed in several important particulars from those used by the recent Geological Survey expedition, there is no question that they were better suited to Powell's special purposes than craft of the latter type would have been. Indeed, considering what the first explorer had to do and the means at his disposal, it is hard to see how he could have provided a better outfit than that with which he began his voyage through the canyon.

The men of the first expedition were mostly Civil War veterans who had gone West after the conclusion of the great struggle. A bold, fearless lot when it came to facing physical danger, their worst defect was an unwillingness to submit to the strict discipline it was imperative to maintain upon such a venture as a voyage through the Colorado River canyons. This independence—the natural outgrowth of the free-and-easy roving mountain life they had been leading—was responsible for disaster and tragedy and all but brought the expedition to complete failure.

The start was made from Green River, Wyoming, late in May, 1869. The head of the Colorado River canyon series was entered a few days later at Flaming Gorge. Almost continuously rough rapids only served to bring out the courage and strength of the men and the gratifying water-worthiness of the boats. Occasional upsets were unavoidable; but the men always managed to lodge against the banks, and the water-tight holds protected the goods just as well when the boats were upside down as when right-side up.

Canyon after canyon was passed as the summer wore on, with only occasional and all too infrequent stretches of quiet water in the open valleys between. Bad rapids were always portaged when there was room; when the walls were sheer they were run. Boats were smashed repeatedly, but never beyond repair. What could not be repaired or replaced, however, were the lost and damaged supplies; nor could the dwindling stores be eked out with game. The gorges proved to harbor almost no animal life. With the voyage less than half over at the junction of the Green and the Grand, but two months' supplies remained of the original ten months'. Three times as much food had been lost in accidents as had been eaten. With no possible chance of replenishing food, the grim spectre of starvation hovered nearer and nearer.

Below the mouth of the Paria the last and greatest gorge of the whole canyon series was entered. The walls reared higher and the rapids grew rougher the farther they went, until it seemed that they were literally going to follow the river into the bowels of the earth as the Indians had prophesied. At the mouth of the Little Colorado there was but a month's food supply left—and before them an unknown distance in water growing constantly more broken. The terrible banging received by the boats in the sinister Granite Gorge started leaks that it was no longer possible entirely to close. The pitifully meager supplies diminished more rapidly than ever from constant wettings; bedding and clothes were rotting and falling to pieces. At the mouth of Bright Angel Creek an inventory taken while new oars were being laboriously sawed out of drift logs disclosed that nothing was left to eat save a little musty flour and dried apples and a considerable amount of coffee.

The Quitters

Running between walls a mile high on either side, they lost much precious time in portaging round bad rapids and in repairing the weakened boats. Every day there was more talk among the men of abandoning the boats and trying to climb out and reach the Mormon settlements to the north while there was still food left. Only the iron will and flaming example of their one-armed leader kept them to the river. The crucial test came at the head of a savage series of falls that has since borne the name of Separation Rapid. The river was running in granite again, with the rapids growing more violent every mile. (Of the force of Separation Rapid I can speak authoritatively, for I upset my boat while running it in 1923, and so traversed the two lower riffles in or under the water.) With the food all but gone and still nothing to indicate that the end of the great gorge was near, three of the men hailed a comparatively open canyon leading away

to the north from the head of the rapid as a possible avenue of escape. Powell told them that they were free to take their share of the food and go, but that he intended to stick to the river as long as there was a crew to man his boat. Only the original trio of malcontents deserted. Two of these were of the crew responsible for the loss of a boat at Disaster Falls.

Abandoning one of the boats, the diminished party ran the rapid safely with the two boats that remained. Two days more and they were out of the Grand Canyon, and a third day took them to a Mormon camp at the mouth of the Virgin. At almost the same time a party of Sherwit Indians ambushed and killed the Howland brothers and Dunn, the trio that had sought safety in desertion. A duplicate set of the records of the expedition was destroyed with them. To replace these and to make a further study of the canyons Powell led a second expedition down the Colorado as far as the mouth of Kanab Creek three years later.

Major Powell's pioneer voyage down the canyons of the Colorado was one of the finest feats in the annals of world exploration. Of less importance in the development of the country than that of Lewis and Clark, as an adventure requiring the highest skill and courage it has rarely if ever been equalled. Indeed, even today the navigation of a boat through the rapids of the Grand Canyon is one of the finest adventures to be found.

Although Powell's first voyage through the Colorado River canyons in 1869 will always rank as one of the outstanding feats in the annals of world exploration, the several expeditions that attempted to thread those gorges in the course of the next half century were compelled to face and surmount the same physical dangers and difficulties that had confronted the pioneer.

Our Outfit

The Geological Survey started studies of the streams of the Colorado River basin in 1909, and by the end of 1922 data for a comprehensive plan of water development was completed for all of the main streams and tributaries with the exception of about 250 miles of the gorge of the Grand Canyon. It was for the purpose of closing this gap in the map that the expedition under Col. Claude H. Birdseye was organized in 1923.

The four boats were of the type used by Julius Stone in his voyage of 1908. The Stone boats were the idea of a trapper named Galloway, who built the first of the type on the theory that, since it was impossible to build a craft heavy enough to withstand a solid collision with a rock or a cliff, it was better to construct a lighter boat, which might more easily be kept away from obstructions. Our boats weighed about eight hundred pounds apiece, and the large watertight compartments at either end held a load of fifteen hundred pounds.

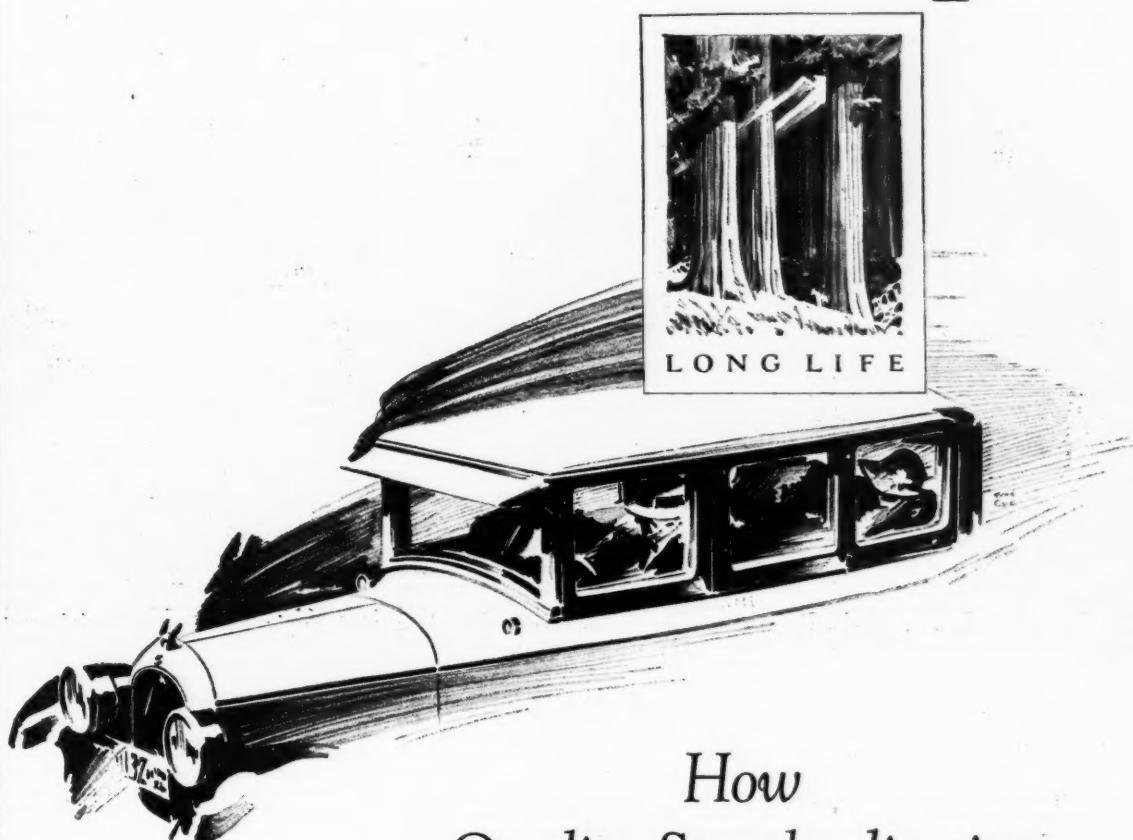
The personnel of our party was picked with no less care than the outfit. All of the engineers, hydraulic and topographic, as well as the geologist were selected as a consequence of outstanding work previously done by them. Three of the boatmen had already worked for several seasons in the Colorado River canyons in boats similar in type to those we were using.

The four boats were named after great canyons of the Colorado through which we expected to pass in the course of the voyage—Glen, Marble, Grand and Boulder. A light folding canvas canoe, included in the outfit on the chance that it would be convenient for carrying the rod in quiet water and to have at the foot of rapids to pick up the wreckage in case one of the other boats smashed up, was called Mojave, after a canyon and dam site on the lower river. This little shallow was expected to have a short shrift if ever it found its way into a rough, rocky rapid. It fulfilled that expectation.

A light, portable radio receiving set was included in the outfit both as a practical utility and as an entertainer. Our receiving set we also expected to give a definite answer to a question that had long been causing much discussion in the radio world: whether or not the ether waves would make themselves felt in a deep depression in the earth. We arrived at Lee Ferry by truck from Flagstaff on July 18 and after two weeks of preliminary surveying and work on the boats were ready to push off on August 1. Old Colorado River men had advised a later departure in order to avoid the high water of midsummer. But as there was three months' work to do in the canyon, and the results of it were needed in Washington in the fall, it was not possible to defer the start any longer.

TO BE CONTINUED NEXT WEEK.

CHRYSLER "70"



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Most important of all—that its endurance should cause people to discard the former ideas of what motor car long life and durability should be, even though its hundreds of thousands of owners daily demand from their cars the seemingly impossible in performance.

September 16, 1926

THE YOUTH'S COMPANION

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FACT AND COMMENT

ONE judges with his reason, but acts according to his character; that is the cause of most human inconsistency.

"HE HAS NO MORE APPETITE than a bird." When you say that do you realize that a bird eats more than his own weight every day—if he can find food enough?

THE WAR seems to have left to both the victors and the vanquished in Europe nothing but mountains of debt and the memory of their dead.—George M. Gillett, M.P.

WHATEVER ELSE the direct primary has accomplished, it has not prevented the lavish and corrupt use of money in politics. That offers fresh proof that it is not laws and regulations, but education and a high personal moral standard among the people, that control such practices.

"WHAT A RELIEF to be free, once more," exclaims Mlle. Suzanne Lenglen, speaking of her decision to become a professional instead of an amateur tennis player. That is just what the officials who have to manage amateur tennis tournaments in France and England are saying too—and not always under their breaths.

COWS ARE RATHER ODDITIES in Palestine, where goats and condensed-milk cans produce most of the milk that is used. A Californian who is interested in the Near East Relief work has recently sent a milch cow to the farm school of the Relief at Nazareth, and the youngsters, lost in admiration of the useful animal, have christened her "Lady Cow."

THE CHEMISTS AND WAR

WE yield to no one in our admiration for the thoroughness and ingenuity of the work which the chemists of the world are doing. The gentlemen who follow that profession have every reason to be proud of their achievements. They are continually improving and simplifying our methods of dealing with matter, extending our knowledge of the possible resources of nature, and adding to the world's apparatus for comfortable and generous living. They are in the very forefront of the army of scientific men who are helping to make mankind the master instead of the plaything of material forces.

But when we hear them say, as some of them did at the recent conference at Williamstown, that they expect the discoveries of chemistry to have a direct effect in diminishing the likelihood of war we are skeptical. Remarkable as the triumphs of chemistry are, they are, after all, in the field of matter, and not in the field of human conduct. The fact that the chemists are teaching mankind to do things or procure necessities of life in new ways, and thereby making disputes over the possession of certain kinds of land or certain kinds of raw material less probable, does not really touch the ultimate causes of war. They may only divert the disputes from one ground to another. The only influence that we can see chemistry exerting on the problem of warfare is the somewhat doubtful one of making the new weapons of the soldier so terrible that nations will be afraid to give their enemies a chance to use them.

Nations fight because they are too proud or too ambitious or too greedy to submit their own view of their rights or their interests to a tribunal of arbitration. Whatever the chemists accomplish, there will always be differences over land, over access to the sea, over the control of the sea, over relative commercial or political power, over the possession of this, that or the other natural resource. Men have been accustomed to go to war over these differences. They will continue to do so, unless we can in some way enlarge the reason, soften the prejudices and tame the martial spirit of mankind. That is not a task for the chemists or the physicists, or for scientific men generally. It is rather a task for the ministers of religion, the philosophers, the teachers, the writers and the statesmen—for the men who deal with other men, and with the ideas which control the conduct of men and women everywhere. We are sorry to say that, in spite of many noble exceptions, these leaders of the people are not so well aware of their responsibilities and opportunities as we should like to see them. But we think they are growing more so. When they as a class become as much alive to their duty toward mankind as the chemists are to theirs, we shall have an assured hope that war is at last in the way of being ended.

VIRGINIA DARE

ON an island off the coast of North Carolina was held the other day one of the most interesting celebrations that any place in America could have provided. The island is Roanoke, and the celebration was primarily a home-gathering of the sons and daughters of Dare County, to pay homage to the first English child born within what is now the territory of the United States; but it was much more than that. The British Ambassador, Sir Esme Howard, was the principal speaker, and the Governor and other distinguished guests were present.

To the spot where the celebration was held Sir Walter Raleigh dispatched, one after another, three groups of colonists. The first two attempts at settlement were failures. Among the members of the third group, which included seventeen women and a number of children, was Eleanor Dare, the granddaughter of John White, the Governor; and to her was born, a few days after the colonists landed, a daughter, Virginia. That was in 1587, thirty-three years before Peregrine White was born at Plymouth.

If nothing else had happened at Roanoke except the birth of a child, history might have forgotten the matter or passed it over lightly; but the settlement that Raleigh established has been known for more than three hundred years as the "Lost Colony," its fortunes unknown, its fate a mystery.

Hardly had the colonists begun to make a home for themselves when it became necessary for Governor White to go back to England for supplies. Three years passed before he could return. No trace of the White settlers remained except the word "Croatan"—the name of a tribe of friendly Indians—cut in the bark of a tree. It had been agreed that, if the colonists found it necessary to move, they should leave a record of where they were going, but the history of the settlement ends at that tree. No member of the group was ever found, no whisper of what had happened ever reached the world.

Romance loves to take the plain garment of history and embroider it with intricate and fanciful designs. So legend has it that Virginia Dare grew up among the Indians, a beautiful girl whom the magic of a rejected suitor changed into a white doe and the silver arrow of another warrior restored to human form and reunited to her lover.

That legend of the white doe and the silver arrow, or, as some versions have it, the silver bullet, has survived all the years, and is known from Maine to Florida. It was probably the inspiration for Bryant's poem, The White-footed Deer, of the old-time school reader. The people of North Carolina did well to celebrate the historic incident that gave birth to so pretty a legend.

A BEST SELLER OF 1678

THE fact that a perfect copy of the first edition of John Bunyan's "Pilgrim's Progress" was sold the other day in a London auction room for \$34,000 draws the attention of the world to one of the most remarkable books ever written. Like another of the world's classics, "Don Quixote," it was written in a jail where the tinker-preacher was confined for his obstinate resistance to the ecclesiastical powers that were in Eng-

land after the Restoration. Bunyan was a man of rather low social position, who had very limited opportunities of education, and probably read little outside the Bible and the religious and political tracts of the period. But he had three great qualities to lead him to literary success—a vivid and sensitive imagination, a burning, passionate interest in the things of which he wrote, and an unpretentious, unaffected, use of the homely, vigorous vernacular of his time.

"Pilgrim's Progress" was a tremendous success from the very first. Within a year two editions were published. Before a decade had passed at least one hundred thousand copies had been sold. When we consider what was the population of England and Scotland in the seventeenth century, and what was the proportion of the people who could read or who could afford to buy books, that is the equivalent of a sale of a million copies today. How many millions have been sold in the two centuries and a half since then we dare not guess. The book has been translated into a score of languages, and probably, if the figures were known, it would be found to be one of the best sellers of 1926, as it was by far the best seller of 1678. An author who achieved such a smashing success today would be made independently wealthy. Bunyan got a few pounds for his book and was satisfied. Not money, but the saving of souls, was his object.

There is no question that "Pilgrim's Progress" is the greatest allegory ever written. Not only that but the next greatest, "The Holy War," was also the work of Bunyan. Few books written by the hand of man have ever delighted, moved and influenced for good so many human beings. Few are so distinguished for the directness, vitality and austere dignity of their literary style. And yet the author was only a poor, half-educated, persecuted tinker turned preacher. If any man since the death of Christ has been inspired from above to write in a way far beyond what his natural gifts would lead us to expect, John Bunyan was that man.

There are only five perfect copies of the first edition of "Pilgrim's Progress" known to be in existence. What would John Bunyan think if he knew that one of those little books had sold for \$34,000? His vanity, if he had any, would be gratified, perhaps, but he would be much more happy to know that today, two hundred and fifty years after his day, thousands of men and women were still reading his book and finding in it pleasure, inspiration and guidance toward the Christian life.

THE HABIT OF ACCURACY

IN some respects it is a tiresome habit, the habit of accuracy; it seems to preclude a sense of humor, or at least the faculty for humorous expression; it seems to imply littleness of mind and lack of imagination. The picturesque extravagances and absurd exaggerations that often give color to speech are not the characteristic charm of people who have either a passion for accuracy or the habit of it. If everyone were unfailingly accurate, it would be a much duller world than it is.

Nevertheless, the persons who minimize the importance of accuracy are usually not those who get the most satisfaction out of life. Even though they do not descend to deliberate untruthfulness, to willful and conscious misstatement of facts, they fail to win the confidence of persons with whom they are associated; and consciousness of one's own brilliancy, if unaccompanied by the knowledge that one has the confidence of others, is a barren satisfaction. Habitual inaccuracy is simply one of the ways in which laziness expresses itself; and to it may be traced a good half of the trouble in the world. Many of the misunderstandings, botchings, failures, even tragedies, are due to habitual inaccuracy of observation, or of expression, or of memory.

Seeking to be accurate in any one of those three respects will help you to gain accuracy in the other two. You cannot remember an incident quite accurately if you did not observe it accurately; when such an effort to remember proves unsatisfactory, you are likely to have your eyes and wits more alert for the next occurrence. So too when you try to think of something that you have seen or heard; if your language is inadequate, it is usually because, instead of a clear outline of specific details, you have in mind only a general impression.

Training yourself to be accurate means training more than your eye or hand or memory; it means training your will.

THIS BUSINESS WORLD

STALIN RULES RUSSIA

ADDITIONAL evidence of the power that Stalin, the chief secretary of the Communist party, now wields in Russia is afforded by the news that Kameneff, another famous member of the soviet governing board, has been deposed from the Politbureau, and his place as Commissioner of Trade given to an obscure young friend of Stalin's, Mikolian by name. Kameneff thus meets the fate that Trotsky and Zinovieff met before him. Kameneff is Trotsky's brother-in-law; his real name is Rosenfeld, and, though he has long been an important member of the ruling organization, he is, it is reported, rather too moderate in his views and not quite sufficiently orthodox in his Communism to suit Stalin. He recently joined Zinovieff in the effort to introduce more democracy into the methods of the Communist party—with this result. He may be sent as ambassador to Tokyo; his suave and gentlemanly manners would fit him for such a post.

OUR RELATIONS WITH MEXICO

ALTHOUGH President Coolidge has made it clear that he has no idea of interfering in the domestic affairs of Mexico, the existence of so much unrest and dissension across the border is bound to make our relations with our neighbor on the south rather delicate. We still have unsettled differences with the Mexican government concerning the operation of the land laws of that country, so far as they affect American investors in Mexico, and, though the President will probably hesitate to press matters at present, the problem still exists. There is constant danger too that our territory will be used as a rallying point for disaffected Mexicans who would like to upset the present government. One General Estrada, with two hundred of his associates, is already under detention at San Diego on suspicion that he was organizing a filibustering expedition to invade Mexico.

THE UNITED STATES IN THE AIR

ALTHOUGH this country has lagged a little behind the European nations in the development of aviation, the last year has seen an increase of interest in commercial flying and an application of private capital to such undertakings which leads Col. Paul Henderson, the manager of the General Air Transport, to assert that we are today leading the world in aviation. During the last year our commercial airplanes flew more than five and a half million miles, carried more than two hundred thousand passengers and carried more than one hundred tons of express matter. There are now in operation thirteen air transport routes, carrying United States mail, and there are already 3,608 landing fields in the country, about 800 of which are in active daily use. At last accounts there were 290 aviators in the commercial service. The government is preparing to extend, light and equip a number of national airways under the legislation passed by Congress last spring. The transcontinental airway from New York to San Francisco by way of Cleveland, Chicago, Omaha and Salt Lake City, and the southwestern airway from Chicago to Dallas by way of Kansas City and Wichita are the two which will first be developed.

THE PLIGHT OF BELGIUM

WE hear a great deal more about France than Belgium, but it is worth while to notice the struggle that that brave little country is making to get back on its financial feet. It has passed through a period of increasing financial difficulty, as France has. Its currency has fallen quite as fast as the French franc, and the burden of debt and reconstruction has pressed as heavily on the shoulders of its people. Now almost dictatorial powers have been given to King Albert. New taxation, added to imposts already heavy, have been decreed. The country is even going back to eating the coarse black bread which it put up with during the worst of the war. The state railways have been turned over to a private company, in order to relieve the state from the financial loss that has attended public operation, and the holders of the floating-debt securities of the government—amounting to some four billion francs—will not be paid by the

government, but may exchange their bonds for shares in the new railway corporation. There is general agreement about the necessity of all these measures; even the Socialists have consented to the abandonment of government operation of the railways. The upward march of Belgium may be slow, but it is undertaken with a sturdy, stubborn courage which is worthy of all praise.

MORE ABOUT ENFORCEMENT

GENERAL ANDREWS' satisfaction with the results of his trip to England and France, which he visited in the hope of getting the cooperation of the governments and the steamship lines in the effort to stop the smuggling of liquor into the United States, is indicated by his own remark that he was "125 per cent successful." He is now engaged in negotiating a similar agreement with Canada. In spite of reports that he was thinking of resigning his post, as chief of the bureau of prohibition enforcement, General Andrews will retain that office at least for the present; and he expresses a great deal of confidence that Congress in its forthcoming session will pass the legislation he has recommended, looking toward more effective enforcement of the law.

MISCELLANY

CAUSING OTHERS TO DO WRONG

THE first duty of every man is to be and to do good. There can never be any possible substitute for a man's personal rectitude. If he makes shipwreck of his own life, the moral universe has suffered an irreparable loss. Whatever religion teaches of forgiveness beyond our merit, no system of theology knows a way to atone for personal wrongdoing.

But it is possible for a life to be lived so worthily or unworthily that what it is in and of itself bulks small in proportion to the influence it exerts on other lives.

Jeroboam, the first king of the northern kingdom of Isreal, was not lacking in fine qualities. He had shown courage and ability. Moreover, even in the matter in which he did his great wrong he was not without provocation; he smarted under the sting of an injury which was his people's as well as his own. There must have been many in his own day and later who acclaimed him a hero; and he narrowly missed the choice of becoming worthily illustrious or being decently forgotten. But, he actually won his place in history as the man who sinned, and who made Israel to sin.

Whether it is ever possible to cause others to sin without sinning ourselves is a question we need not discuss. Certainly, if we knew that was to be the result of an act which in itself might not be a wrong one, we should sin in doing that act. But very little of the good we do is done for ourselves. To be considerate of the good of others is of the very essence of goodness in one's own life.

It is just as possible to exert a permanent influence for good as for harm. If Jeroboam had done a good thing which had become a custom, and his name had been forgotten as that of one having in any way accomplished it, still would high heaven have made sure of the record, and a world that might not have known whom to thank would have breathed a blessing on a man unknown but still a benefactor, who did right so inconspicuously that the world forgot him, but so effectively that for generations he helped others to do right.

WARTS

IT is not necessary to describe a wart. Everyone, during childhood at least, has had personal experience of them. They are of various sizes and may occur singly or literally by the dozen. They are especially common on the backs of the fingers, especially on the knuckles, but they sometimes come on the face, scalp, or feet. Usually no pain attends their presence or growth. When they come on the sole of the foot, however, usually on the ball of the great toe or on the heel, they are very painful. The scalp is another inconvenient place for them, for there the brush and comb irritate them.

When many little warts occur together they have usually spread from a single larger one. Warts are undoubtedly contagious, and they are also autocontagious; that is to say, one wart may produce many more on the same person. Warts occur most often in children, though adults are by no means exempt, and they are not uncommon in the

A FRANCO-GERMAN STEEL TRUST

THE long-talked-of agreement between the French, German and Belgian manufacturers of iron and steel, is at last signed, sealed and delivered. The German producers are allotted 43.22 per cent of the total production, the French 39.45, and the Belgian 11.60 per cent. The remaining five or six per cent is said to be reserved for Polish, Czechoslovakian and Austrian steel concerns, if they decide to accede to the agreement. The prices as well as the particular markets to be supplied by each party to the agreement will be determined by the board of control. The British steel men might have joined the agreement if they had wished to do so. It is said they refused because the French and Germans insisted on regarding Canada, Australia and India not as British colonies but as true nations and would not surrender their right to compete in their markets. The spokesmen of the new "trust" deny that it is in any way hostile to the steel industry of the United States, but it is probable that it will make European competition more formidable than it has been. The organization of this combination foreshadows a movement toward international economic cooperation in Europe which may come to include all the important industries.



Don't let anyone kid you on this subject

FOR sometime now we've been talking to boys about a subject which interests them greatly . . . judging by the thousands of letters we receive from all over the country. The subject is coffee-drinking—and the peril lurking in this unwholesome habit for the chaps who take pride in being physically fit and 100% vital and healthy.

And now a number of boys report to us that some misinformed fellows are trying to tell them that coffee and tea are all right—that they won't harm anybody. All we've got to say is—"Don't let them kid you!" Listen!

The average cup of coffee contains from $1\frac{1}{2}$ to 3 grains of an artificial stimulant called *caffein*. Caffein is a drug. In fact, doctors sometimes use caffein—in cases of heart failure, when a stimulant is needed. And you know the dose they use? *The same amount as you get in the average cup of coffee!*

Caffein affects the nervous system. It interferes with digestion, and often causes headaches and sleeplessness. And it gradually saps away your reserve vitality, by deadening the warning signals of fatigue. A fine thing to take every day with your meals! We'll tell you what: You just ask your coach or physical trainer if a drug-containing drink like coffee is good for a fellow who wants top-notch physical condition.

Of course, the fellows who stick up for coffee say . . . "Aw, they're just trying to get you to use Postum." Trying to get boys to drink Postum? You just bet we are! And proud of our efforts! For Postum is a *real* drink—a hot, delicious mealtime drink that hasn't an ounce of harm in it. In fact, it's just the other way. For Postum is made of Nature's own golden grain—whole-wheat and bran, skillfully roasted. Figure for yourself what a healthful drink it is!

Postum is particularly splendid and delicious, when made with hot (not boiling) milk, instead of the usual boiling water. Because combined with Postum's healthful elements, you get all the body-building qualities of milk—the finest of foods. Even if you dislike milk plain, you'll vote Postum-made-with-milk a knockout!

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THE MOTHER-BIRD!

*The mother-bird upon the nest,
When I, her friend, draw near,
Presses the eggs beneath her breast,
Trembling with pride and fear.*

*Love, like a voice, from out her eyes,
Tells all her heart to me,
And in her helplessness there lies
An unresisted plea.*

—CHRISTINE SWAYNE

MR. PEASLEE ON SHEEP AND HENS

"**W**HAT on earth!" exclaimed Caleb Peaslee in amazement as both he and Deacon Hyne were startled to their feet by a squalling of barnyard fowls.

"Hawk, mebbe," the deacon conjectured as they hurried to the seat of disturbance; he was a little behind Caleb and nearly ran into the latter when Caleb stopped to laugh almost hysterically. The deacon peered nearsightedly to find the cause for his amusement.

"It's that old white cat of my wife's," Caleb explained between weak cackles. "He's got his head into a salmon can,—after the little bit of fish that stuck to the inside, like enough,—and it's so rough he can't draw his head back, and he's gone kind of frantic. And he's scared the hens 'most crazy!"

He made slow steps toward the frightened animal, talking soothingly until the cat suffered it to be taken into Caleb's friendly lap.

"There!" said Caleb comfortingly, when he had carefully worked the can from the dazed cat's head. "Don't you run your head into a place you can't back out of again!" He set the cat upon its feet and watched it vanish out of sight beneath the barn.

"Don't take a great sight out of the common to craze a farm critter," he observed wisely. "Them hens was used to seein' the cat, and they'd never mind him more'n they would another hen—but you turn him loose with that tin thing where his head ought to be and every hen that sees him goes pretty near crazy; they know what a cat looks like, and what a salmon can looks like, take 'em sep'rete—but the two things jined together makes somethin' out of common to 'em, and their minds won't stand it, you see."

"Minds me," he went on, "of one time when I had about fifty sheep and was pasturin' 'em up close to the house one spring, till the grass got start 'nough in the pastur' so they wouldn't sheep it down too snug to the roots. My wife was right in the middle of her spring house-cleanin', and amongst other things she'd been paperin' the settin'-room; and out in the back yard there was a pile of trimmin's she'd cut off the paper to make the aigdes of the pattern match; there was a pile of 'em twice as big as a barrel, I sh'd say, layin' close under the aigde of the back porch, and on the porch, right over the trimmin's, was a wooden pail full of glue sizin' that she'd gone over the wall with, to be sure the paper would stick good on the wall.

"Well, I'd been thinkin' for a day or so that it'd be a good plan to shift the sheep down into the pastur! One reason was they'd got the turf fed down about as close as they could and wa'n't gittin' much nourishment out of it; and another reason was the old wether was gittin' uneasy over the feed gittin' poor and was out over the fence after better grass—and jest as sure as he'd git out, up he'd come to the house and git into some manner of mischief.

"I'd tried to drive 'em down to the pastur' alone but, not havin' a dog, I hadn't been able to git 'em started. They'd wander round and sep'rete, but they wouldn't herd and go through the gate. So I'd made up my mind I'd have to git help to stampede 'em through the gate and git 'em goin'—and after that I c'd keep 'em movin'."

"Well, one mornin' I went down to give 'em one more try, but when I got there the old wether wa'n't anywhere to be seen. I'd jest made up my mind I'd better go up to the house and see what he was up to, if anything, when I heard a sort of blattin' up the road to 'rds the house, and then all at once every sheep in the flock started my way, blattin' and snortin' 'sif they was bein' terrified out of their lives. All at once I ketched sight of somethin' comin' over the fence to 'rds 'em that for a minute I couldn't make head nor tail of. But after a second glance I knew what it was; it was that old wether with streamers of wall paper flyin'

'round him till he looked like a sheep May basket. I had barely time to yank down the bars when that whole flock got abreast of me—and the way they piled out of that barway and down the road to 'rds the pastur' would have done you good to see. The road makes a big curve there, you know, and by hurryin' a mite I was able to git to the pastur' bars ahead of 'em—so I had the bars down and when they got along there I turned 'em in by wavin' my arms and hollerin'."

"I got the rights of it when I got to the house; my wife had seen the old wether climb onto the porch and go to nosin' round that pailful of glue sizin'—and she'd hollered at him so she made him jump, and in doin' that he upset the pail and went over the aigde of the porch with it,—wether, glue and strips of paper all in a bunch,—and in gittin' his laigs under him again he'd rolled round in that mess 'nough to stick about half of it onto himself.

"Them sheep wa'n't afraid of paper nor of another sheep, tak' em sep'rete, like the cat and the can—but a sheep that had streamers like a kite was too much for 'em to stand—like them hens."

"And like a lot of humans, too," Caleb added honestly. "If they git startled with a comb'nation they ain't used to, they ain't much better'n sheep and hens about losin' their wits, such as they are."

THE VERY HUMAN ALCOTT

Not many know that the author of "Little Women," when a young woman, went out to do housework from sheer poverty. It was in 1853, says the Boston Transcript, when she was in her twenty-first year, that she wrote in her journal: "In May, when school was closed, I went to L. as a second girl. I needed the change, could do the wash, and was glad to earn my \$2 a week. Home in October with \$32 for my wages." The family certainly needed the \$32. It was about this time that Bronson Alcott went west to make his fortune lecturing or something. Louisa's diary tells the result:

In February father came home. He arrived in the night. We were waked by hearing the bell. Mother flew down, crying, "My husband!" We rushed after, and five white figures embraced the half-frozen wanderer, who came in hungry, tired, cold and disappointed, but smiling bravely and serene as ever. We fed and warmed and brooded over him, longing to ask if he had made any money; but no one did till May said, after he had told all the pleasant things, "Well, did people pay you?" Then, with a queer look, he opened his pocketbook and showed one dollar, saying with a smile that made our eyes fill. "Only that! My overcoat was stolen, and I had to buy a shawl. Many promises were not kept, and traveling is costly, but I have opened the way and another year shall do better." "I call that doing very well," said mother. "Since you are safely home, dear, we don't ask anything more." Anna and I choked down our tears and took a little lesson in real love which we never forgot.

All Concord seems stiff, straitlaced, ice-bound, except the Alcott family. They were very human. Thoreau once wrote from Staten Island to Emerson: "Concord is still a cynosure to my eyes, and I find it hard to attach it, even in imagination, to the rest of the world and tell where the sea is." The Alcott family—that patient mother, the lively, humorous girls, the blundering old dreamer of a father—will always serve the purpose of stitching transcendental Concord to the world of men and women.

AS ONE ARTIST TO ANOTHER

The line between the work of the skilled craftsman and the creative artist is not a hard-and-fast, inflexible one. The arts merge into the crafts gradually, and the more a workman of skill and artistic appreciation respects his own work the nearer he approaches in spirit to the man of genius. A pleasing anecdote is related in William Howe Downes's recent book, "The Life and Work of John Singer Sargent," the great American artist who died last year.

The portrait painted by Sargent of Frederic P. Vinton had, after some thirty years, cracked badly, and the artist wished to have it restored. He heard that an expert restorer of pictures, Dan Nolan, could do it if it could be done, and to him the canvas was carried. Nolan made a good job of it; but when he took it back to Sargent's studio he refused payment, saying with pride, "It's a tribute from one great artist to another!"

Sargent, the greatest portrait painter of his time, possessed a lively sense of humor, and he could not but be amused; but he also

possessed something better than humor, a warm, sympathetic and comprehending spirit. There was no ridicule in his amusement; he was frankly pleased, but in telling some friends a few days later he remarked that, since Dan would not take his pay in hard cash, he must think up some other way.

"Why don't you do Dan's portrait?" suggested one of the other artists present. "There is nothing he would treasure so much as that."

"Do you really think he would care for it?" asked Sargent, thoughtfully, and a little later he suggested to Dan that he would like to make a charcoal drawing of his head. But Dan, though evidently delighted with the idea, was bold enough to hint that he would prefer a sketch in oils.

"Don't you like my drawings?" asked Sargent.

"You know I love them, Mr. Sargent," said the canny and jovial Dan, "but I am thinking of my descendants, and how your picture would be better kept for them. You see, my wife and I are both Irish, and in our household we sometimes have family discussions. Now, if she should throw her shoe at me and it happened to go through your charcoal drawing, it would be spoiled forever; but if it just dented an oil painting, I could always fix that up as well as I did the Vinton!"

Whether Mrs. Nolan's shoe was a convenient myth or an actual danger, Sargent saw the point, laughed and agreed to the change.

There is now in the Corcoran Gallery in Washington his admirable sketch portrait of Dan's head, in oils, across the top of which runs the inscription, "To my friend, Daniel J. Nolan."

THE SHAMROCK FOREVER!

IT takes more than a combination of colors and a heraldic device to make a flag. Usually, it takes time and historic associations. The present flag of the Irish Free State, although new, is meaningful; it is a tricolor with a broad stripe of white, symbolizing peace, joining the orange and green—orange for the traditions of Ulster, and its adherence to William of Orange in driving the Stuarts out of Great Britain, and green for all the rest of the Emerald Isle. It is a flag held already in respect and honor as an officially representative banner; but it may well take a good many years for it to supplant the beloved harp and shamrock in the affections of Irishmen. An Irish florist, decorating his establishment for a civic occasion, viewed with distaste the tricolored bunting proffered him by an up-to-date dealer in flags. He had forgotten the change.

"You don't expect me to put up this new flag, do you?" he asked, with manifest feeling.

"Why not?" was the response.

He covered his emotion with the ready answer, "Well, I'm a florist, and I believe in shamrocks."

A BRAVE MAN

A man in the public gallery at the courts said to his neighbor, "That last prisoner put up a very good fight, didn't he?"

"No wonder," replied the second. "He's got the courage of his twenty-one convictions."

—London Daily Mail.

THE BEST MOTION PICTURES

Editor's Note: There are so many motion pictures; how can any family tell which are really worth seeing? The following list, revised every week, contains the pictures which The Youth's Companion recommends to you, as clean and interesting. We cannot express any opinion about other pictures which are shown on the same programme.

THE YOUTH'S COMPANION BLUE-RIBBON LIST

The Savage—First National

A scientist's hoax and a make-believe wild man provide some good fun. Ben Lyon and May McAvoy.

Behind the Front—Paramount

A rollicking farce among the doughboys of the A.E.F. Wallace Beery and Raymond Hatton.

Lovely Mary—Metro-Goldwyn-Mayer

An orphan herself, Mary befriends another waif and finds happiness and a home thereby. Bessie Love.

Tramp! Tramp! Tramp!—First National

The uproariously funny story of a cross-continent walking match. Harry Langdon.

More Pay, Less Work—William Fox

Two young people show their parents that co-operation is better business than competition. Mary Brian and Charles Rogers.

The Last Frontier—Producers' Distributing Corp.

Adventures of the homesteaders of the '60's. Indian raids and stampeding buffaloes. William Haines and Marguerite de la Motte.



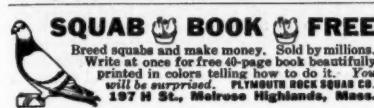
Every family should have one or more pets. In establishing this column, it is our desire to assist our subscribers in the selection of these pets by publishing the advertisements of reliable persons, who have them for sale.



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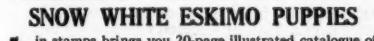
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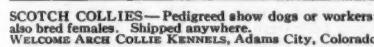
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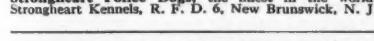
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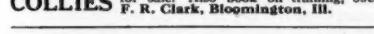
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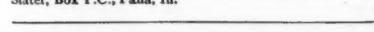
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8 Arlington St. Boston, Mass.

How to Groom a Horse

By PARKHURST WHITNEY



International Show

Cleaning his feet with sawdust: the owner of a giant English "shire" horse grooms his champion just before entering the ring at an English agricultural show. These horses are unsurpassed for heavy farmwork and haulage

ONE of the sights I like to see is a perfectly conditioned horse cantering through brilliant sunshine. How he glistens! His coat is like burnished metal, but it is more beautiful than metal; for it is a rippling, living surface, moving to the flex and flow of the big muscles underneath. He is a grand picture, and he knows it. And I know that there is plenty of elbow grease in his stable.

Elaborate equipment is not needed to keep a horse in a good coat. A wisp of hay or straw is almost as good as currycomb or bristle brush. A rumpled newspaper is a substitute for the chamois polishing cloth. In an emergency you can groom him with your bare hands, as it is done in India. But one thing you must use—and that is elbow grease.

In hot weather or cold, the aim of grooming is to put the horse in his stall warm, dry, clean and limber. In summer, grooming really begins about a mile beyond the stable. Let him walk that last mile, and he will come in dry, needing only a dab here and there with a damp sponge before you go to work with brush and cloth.

If he comes in hot, in hot weather, go over him swiftly with a sponge. Pay particular attention to mouth, nose, ears, the hollows under the jaw, the inside of the hind legs, and the dock, or fleshy part of the tail. If it is a scorching day, a bath with a hose is permissible. But this is so risky that it is not recommended to the person who is out of elbow grease. It should be done in the sun. Afterward the horse should be covered with a light blanket or walked in the sun until dry.

When he is dry it is time for brushing and polishing. The old-fashioned currycomb, with saw teeth, is tabooed. It was a stupid, cruel tool. A bristle brush is better, and that should be used considerably on a thin-skinned, spirited animal. Get down into the roots of the mane and the hair on the fetlocks. Finish with a chamois cloth.

Dandruff, while always unsightly, does no great harm to the coat in winter. In summer it can be a positive torture. If you love your horse, you will see that he is free of it. The combination of sweat and dandruff is about as pleasant as the hives. Take a bristle brush or a currycomb with corrugated edges, and

work at his coat with a circular motion. When the dandruff is loosened go at him with a wisp of straw which has been dampened. Be sure that it is damp, as the dandruff will then cling to the wisp.

When a horse comes in wet with rain, you will need first a scraper. It is a narrow, flexible strip of brass; and if you grasp it at both ends and draw the thin edge over his coat, you will be surprised at the amount of water it will scrape off. A shingle is a handy substitute.

Now put on a blanket and a hood. If you have no hood, you must rub his ears, neck and head until they are dry. Then you must bandage his legs, loosely but warmly. If he is very wet and the weather is very cold, an additional blanket should be put on in about twenty minutes. The moisture will be drawn to the top blanket, which can then be removed.

When he is dry, brush him thoroughly. Be sure you get all the dried mud off his belly and legs. Never wash the mud from a horse's legs unless you are prepared to dry them immediately.

If the horse comes in very tired, his fore legs may be bathed from knee to foot, his hind legs from hock to foot, in water as hot as your hand will bear. Do one leg at a time. Dry it and bandage it. Rub his fore legs and knees, shoulders and thighs with weak liniment. A tired horse needs extra elbow grease and extra care for some time after he is stabled. He is susceptible at such times to a reaction—a chill or cold sweat. A cold ear is the danger signal. When you get that signal he must be rubbed again, or given an extra blanket, or both.

And then the foot! The Arabs, great horse lovers, have a short proverb in which is packed a volume of truth: "No hoof, no horse." The shiniest of coats is no good unless there is a sound foot under it. Grooming is not complete—in fact, it is a failure—unless it includes a careful examination of that most important member. Look for loose or worn shoes. Look for pebbles wedged between hoof and shoe. Look for pebbles or nails in the frog. Look for cracks in the hoof and scratches around the fetlocks. Look at the general condition of the hoof. It needs moisture, and should be washed frequently, inside and out. In hot weather, never lose a chance of putting your horse through a puddle or shallow stream. Much lameness is caused by pounding mile after mile on hard, dry roads.

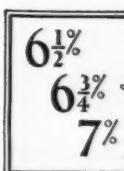
The importance of this care is obvious. Whether he is used for hunting or ploughing, the horse is a useful animal. You may neglect your household pet and suffer only in the esteem of your friends. But when you neglect your horse, you touch your pocket-book.

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42nd Weekly \$5 Award



MEMBER H.
W. BEDEr,
JR. (16), of Pleasantville, N. Y., has shown exceptional ability in the construction of this model of a raised-deck cruiser. The design is original. Although this model is not capable of going under its own power at the present time, provision has been made for the installation of an electric motor that will make the model self-propelling.

Member Beder describes his model as follows: "The Nancy II is 36 inches overall, having an 8-inch beam. Its draught is 2½ inches at the bow, decreasing to 1½ inches at the stern. The hull is constructed of a solid bottom, to which the sides, steamed and bent to shape, are fastened. The hull is internally braced so that it will keep its original shape."

"The raised deck is 15 inches long and is finished off with a piece of moulding. At the rear is a cockpit 7 inches long, which is reached by a pair of stairs from the deck. Underneath are three brass portholes fitted with glass.

"The pilot house is constructed of mahogany and fitted with glass windows, curved roof, door and a rug. The last now covers an opening which will be used to get at the motor if one is installed. The shaft connecting the propeller is so placed that the motor installation can be readily made. The rudder control is in the rear cockpit. The cabin construction is similar to that of the pilot house. The windows are fastened in with plastic wood.

"The cruiser is painted with light-blue Duco above the water line, the mouldings and steps being a slightly darker shade of the same color. Below the water line it is painted a lawn green. The flag staff at the bow carries the Union Jack, while that at the stern flies the American Ensign. Two chucks are fastened to the mouldings, and attached to a capstan is the chain and anchor.

"Just to the rear of the ventilator on either side are the running lights, painted with the proper colors, red and green. A pilot-house bell and two life preservers complete the equipment. The total cost of building the model was approximately \$8.00."

Member Beder's project is excellently planned, and the construction is of the first rank. The award and promotion to Membership are well merited.

Special Award



MEMBER H.
WEYL (17), of Rochester, N. Y., has built up a profitable business making fancy lamp shades and signs. The drawing was made by Member Weyl. The lamp was made from an old blue-glass vase, the design being painted on with artists' oil colors and then shellacked. Frames for making shades can be purchased at the ten-cent store. They are painted with "sealing wax" paint. This is made by dissolving sticks of sealing wax in denatured alcohol. The parchment for the shade is fastened to the frame with adhesive tape, and fancy braid is glued around the edge.

Membership Coupon

To join the Y. C. Lab, as an Associate Member, use the coupon below, which will bring you full particulars concerning the Society. If elected, you will have the right to ask any question concerning mechanics, engineering, wood and metal working, radio, and so forth. You will also become eligible to compete for the Weekly, Quarterly and Annual Awards made by the Society, and you will receive its button and ribbon. There are no fees or dues.

The Director, Y. C. Lab
8 Arlington Street, Boston, Mass.

I am a boy years of age, and am interested in creative and constructive work. Send me full particulars and an application blank on which I may submit my name for Associate Membership in the Y. C. Lab.

Name
Address

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The National Society for Ingenious BoysAfter the Shutter
Has Clicked—2

By HARRY IRVING SHUMWAY

Director's Note: This is the third of three articles on photography by Councilor Shumway. The two previous articles appeared in our issues of June 10 and August 19.

NOW for the printing. We have a strip of film in the negative—white for black and black for white. The next step is to put a piece of sensitized developing paper against the film and print the picture. Only one can be done at a time; so cut your film into the six separate pictures.

For this we shall need the three trays, as before, with a fresh M. Q. solution in the first, water in the second and a fresh hypo solution in the third. You will have to keep two separate bottles of hypo solution, one for films and one for paper.

We need a printing-frame for this work, and any photographic-supply house carries them. Get one larger than your films. In any event, I'd get at least a 5x7, fitted, of course, with a piece of glass. The light in the printing room need not be so deep as for developing films. An ordinary red bulb, if you have electricity, or an amber-colored one will do. If there is a window in the room, cover it with several sheets of red and yellow tissue paper. Be sure this light is safe; you can test it by holding a small piece of your printing paper near the source of illumination for a minute and then developing. If it turns gray or black, your light is unsafe. You can make it safe by adding some yellow or orange paper, shutting out the too white light.

A print is made by exposing a film and a piece of paper in contact to a white light. By white we mean any electric bulb of 50 C. P. or more, a gas jet or gas mantle, or a strong kerosene light. It is the white light that does the printing. Daylight will not do owing to its intensity and the fact that it varies so much in strength from time to time.

Let's print a picture, now, in imagination. Our light is safe, the three trays are ready with M. Q. solution, water and hypo. Place the first negative in the printing-frame, laying it on the glass with the film side up. Place a piece of the paper on it film side down. It is film to film. Now press down the back of the printing-frame and secure it with the springs. The exposure is made by allowing the white light to play through the glass upon the film and thence through to the paper.

You must learn exposure through testing. Suppose your printing light is one 50-watt bulb. Cut a piece of your printing paper into inch-wide strips. Put one in the frame against a negative and print it. Try exposure of ten seconds one foot away from the bulb. Too weak? Very well, try another strip twenty seconds. This method will make you expert in a short time, and paper is not expensive.

A correctly exposed negative will develop in about twenty to thirty seconds. After that it seems to hesitate and will allow you time to give it a brief rinse and sink it into the hypo bath. If it keeps right on getting blacker in the developer after thirty seconds, the exposure has been too long. Practice will make you perfect—and only practice.

Leave it in the hypo bath from ten to fifteen minutes, giving it a stir once in awhile. Of course, no trace of hypo should get into

the developer; that would spoil it. If your fingers get into the hypo, wash and dry them before you put them back into the developer. This may sound foolish, but you will find that it is not, if you try it. Hypo kills developer.

After the print is fixed, wash in moving water for half an hour—or in ten changes of clean water. Here again we must say: get all traces of the hypo off the print. Otherwise it will turn yellow in a short time.

If the paper is a mat or velvet finish, just dry the prints face up on a clean piece of paper. If they curl (and they will), you can flatten them out when dry by drawing them under a ruler's edge on the back of the print.

The high polish or glossy finish is done in this way. Of course you have to use a so-called glossy paper. Develop and finish in the usual way. The gloss is imparted to the print by placing it face down on the polished side of a ferrotypic tin and rubbing it flat with a rubber roller. When dry it can be picked off. This finish brings out the last bit of detail. All the pictures you see in The Youth's Companion are made from glossy prints. The ferrotypic tins you can purchase from a photographic-supply house; also, the rubber rollers.

Really, that's about all there is to this finishing of pictures. It sounds simple, and so it is. But it takes infinite patience and study to arrive at even near perfection. Nothing can be slighted; carelessness in unsafe light, contaminated solutions, and so on, can spoil many pictures. But if you are careful and use your head, soon you won't spoil any pictures.

I might add here that good small-print finishing is a highly profitable profession. The competent photographic finisher (whether he is fifteen or seventy years old) can make a fine living. His profits are only limited by his field and his ability to work. Everybody wants finishing done at one time or another. It is not difficult for a young man to start a little business in this branch of photography if he can learn to do first-class work.

Of course as you progress, and if you are doing good-sized batches of pictures, the cheapest way is to mix your own solutions. This is simple, and your chemicals are not many. All you need is a set of photographic scales and a quart graduate and some bottles. And when the hand printing frame gets too slow for you, a printing machine saves a lot of time and money. The formulas are all given in the packages of films and paper.

Doing your own finishing is undoubtedly cheaper than paying to have it done—if you are going to do any amount of it. The articles bought, such as safe lights, trays, printing-frames, never wear out with ordinary usage. Aside from the cost idea, it is infinitely more fun to do pictures yourself than to press a trigger and call for them at a drug store a day or two later. I have been doing pictures for years, ever since I was thirteen, and there is the same old thrill now when I step into the dark room with some films to turn out that there was when I pestered the village photographer until he taught me how to do my first negative. Incidentally my first happened to be one of the best I ever did.

Maybe yours will be too.

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Special Awards



MEMBER WILBUR McCREERY (14), of Mason City, Ill., has shown considerable ingenuity in adapting his ice-cream freezer so that it can be driven by the farm engine. The shaft and crank of the freezer were discarded because of insufficient length. A longer shaft, bearings, sprocket wheels and chain were obtained from an old fanning-mill elevator. After assembling these parts as shown in the photograph, the base of the freezer was securely fastened with four wooden blocks. Two braces made of strap iron hold the freezer firmly in position and prevent the bucket from turning. The large pulley was formerly used to run a cream separator. The use of discarded pieces of machinery to build a useful device is commendable.

MEMBER PAUL ANDERSON (14), of Los Angeles, Calif., has made an excellent model of the yacht Beaver, for which he is given a Special Award and promoted to Full Membership.

Member Anderson says: "I constructed the model by following the ideas I obtained from the article called 'A Scientific Way to Construct Model Sailboats' on the Y. C. Lab page on February 18, 1926. A scale draw-

ing was made from the photograph of the original Beaver. Having decided to build my model on the 'bread and butter' plan, I cut 26 pieces of ¼-inch wood to approximately the right size and shape with a coping saw. These were glued together with waterproof glue. When they were thoroughly dry I chiseled out the center until the hull was thin and then smoothed the outside with a block plane and sandpaper. A mould was made for the lead keel, and it was cast and attached. After making the deck and masts the various parts were given seven coats of spar varnish and then assembled. The boat is 26 inches long, 5 inches beam, and 7 inches from the bottom of the keel to the deck. The mast is 31 inches long and the boom 17 inches. The mast was stepped 8 inches from the bow."



MEMBER MERTON REEVES (11), of Flora, Ala., is promoted and given a Special Award for his ingenious use of discarded material in constructing models. For one of his years, Member Reeves shows considerable ability in adapting material at hand to suit his needs. Here is his description of the models, shown above, of a locomotive and two airplanes:

"The boiler to the locomotive is made out of a 10-gallon gas tank. The smoke stack is made from a 3-inch pipe about 8 inches long. The bell is a discarded dinner-bell. The sand dome is made from a pine oil can with connection attached to make distribution of the sand on the track. The boiler is made from a one-pound coffee can. The steam exhaust pipe is made from part of an old bugle. The cab is made from scrap boxes of white pine. The top ventilator, or air hole, is covered with small pieces of tin. The coal car, or tender, is made from a white-pine box covered with old sheet iron. The water tank is made from a one-pound coffee can. The rear, or drive, wheels are made from pine-log wheels. The front wheels are made from a small poplar log. Piston rods are made from bean sticks. Cylinders are made from one-gallon varnish cans. The air pump is made from a

(Continued on page 669)

The Secretary's Notes

OUR first complete application has been received from South America. Associate Member William R. Pettigrew (15), of Porto Alegre, Rio Grande do Sul, Brazil, was formally elected to the Y. C. Lab on August 24. His project, well described, and illustrated with two photographs, was a toy derrick.

As a number of our members have suggested, the heading of our page will soon have to be changed from "National" to "The International Society for Ingenious Boys."

Many projects are being received in the competition for the "Toy Constructors." The details of this contest were announced in the issue of September 2. In submitting projects, be sure that they are adequately described and illustrated.

Last month the Associate Members' and Members' Certificates were mailed. Have you received yours? Special care was taken to see that no one was omitted in this distribution. If by any chance you have failed to receive yours, let the Secretary know at once. A few have been returned to this office for lack of correct address. If you have changed your residence, notify the Secretary.

Projects are already being considered in the contest for the Fourth Quarterly Award of \$100.00, which will be made in December. Every project you send in is most carefully considered when regular Weekly, Special or Quarterly Awards are made. It is unnecessary for you to state that you are competing for such an award.

The Y. C. LAB HOW TO TAN A HORSEHIDE

DIRECTOR'S NOTE: The Question and Answer Department recently received a request for directions as to the best method of tanning a horsehide. The question was referred to Mr. E. E. Harriman, an authority on outdoor matters, particularly connected with Wild West affairs. His reply will be of general interest, since smaller hides may be tanned by the same methods, if weaker solutions are used.

THE first thing is to flesh the hide, taking off all fat, bits of the flesh that adhere and any blood or stringy tissues. Do this with the back of a drawknife that has been ground round and smooth, pushing it from you at an angle, to rub the superfluous parts off.

The hide must be well covered on the flesh side with salt, folded in from the sides to make the parts meet, then brought in from each end, to make a fold one third its length, and laid in a cool place six days before the washing. Clean the salt off before washing.

Make a strong solution of sal soda and laundry soap—about two large bars of soap and three pounds of sal soda—in a vat or big barrel half full of lukewarm water, adding half a pound of concentrated lye and eight ounces of sulphuric acid, stirring it in well just before putting the hide in it. Use a strong, hardwood paddle with a square end and a heavy scrubbing brush on a handle and scrub and manipulate the hide till the grease and glue are well washed out of it. Rinse the hide three times in clear water and examine it to make sure the grease and glue are gone.

Mix a solution of fifteen gallons of water and twelve fluid ounces of sulphuric acid with ten pounds of salt, the acid to be added after the salt is dissolved. Use a wooden vat or barrel and keep your face to one side when adding the acid, to avoid inhaling fumes. Now lay the hide in this solution and have it well covered by the liquid. Leave it. After it has soaked two weeks, take hold of the hide and stretch it over your knuckles, hair side next the hand, and look at the flesh side. If it looks a leaden blue, souse it again and wait four or five days more. When the hide looks white when stretched, it is tanned. Until it does so, just be patient. The best tanned leather often stays in the vat months.

After the horsehide is tanned, haul it out on a bench or board table and squeegee it with a round-edged board to get the solution out of it. Then hang it on a rope and let it drain and dry a little. When it is still damp, but not wet, take it on the bench and roll and rub and pull it in every direction, stretching it symmetrically.

If it dries too fast, roll it for two days, then open it up and repeat. If you want a pliable robe, it must be stretched and rubbed daily until it is thoroughly dry. Hang it in the shade always. After it is dry, it may be dried with gasoline. Rub the hair full of corn starch or fuller's earth and hang the hide on a rope in the sun. After it dries again, beat the dry earth or starch out with a paddle, and your hide is ready. Brush the hair well at the last. It will be a whale of a big job.

baking-powder can. The headlight is made from a Carnation pint milk can, the cow catcher, or guard, from small slats. The entire length is 5 feet 4 inches; the height is 2 feet. A 10-inch track is required for operating. The number is N. Y. C. 54.

"The airplane on the ground is from white-pine boards for the wings. The body, tail and rudder parts are made from an old orange crate. The landing wheels are cut from a small poplar log. Roller skate wheels support the tail, and kite cord is used to steady the wings. The wing spread is 32 inches, the tail spread 4 inches, and the fuselage is 5 inches wide and 26 inches long. The plane that I am holding in my hand is made from white pine, and the fuselage is cut in shape from a 2x2-inch piece 15 inches long. The upper wing is 22 inches long, and the lower is 19 inches. The landing wheels are small cart wheels, and the wheels underneath the tail are from a bed roller."

Questions and Answers

Q.—How can I make a simple yet serviceable blow torch suitable for soldering parts of a radio? Associate Member John D. Wilson, Jr., 1303 10th Ave., Belle Plaine, Ia.

A.—by Councilor Shumway: The following is a description of a simple blow torch which I think you can build without much trouble: Get a medium-sized oil can, one of those round, flat-bottom ones used for oiling autos. The spout is cut off close to the screw part, and a brass tube of about $\frac{1}{8}$ -inch diameter is soldered to the stub end. The tube is bent over at a convenient angle for soldering, say about 45 degrees. A piece of wicking is drawn into the tube so the upper end is within $\frac{1}{4}$ inch of the tube end. The end of the tube is then fitted with a piece of brass rod with a very small hole in the center. Make the hole as follows: Before the piece is cut from the rod, it is held in a vise, and the sharp end of a scribe-awl is carefully driven into the center. A little oil placed on the end of the scribe-awl point will keep it from sticking to the metal. Measure the depth of the hole and cut the rod off just above the point. File the end of the piece cut off with a fine file until the point of the hole is reached. This hole must be so small that light can barely be seen through it. The combustion chamber is made of a piece of brass tubing driven over the end of the smaller tube on the spout. About $\frac{1}{2}$ inch from the back end of the larger tube four or more holes are drilled to admit air to the gas. Fill the can about $\frac{1}{2}$ full of gasoline and allow time for wicking to become saturated to the upper end. Hold a lighted match to the rear of the burner, and the heat will convert the gasoline into gas, which will then burn with a flame sufficient for soldering.

Q.—I would like to know which is the best way to lubricate the bearings of a bicycle properly—to pack the bearings in cup grease or to squirt a few drops of some light oil on the bearings? There are some oils recommended for this work that seem to me to be pretty light oil for this purpose. Associate Member Clarence R. Westaway, Canton, N. Y.

A.—by Councilor Townsend: One of the best ways to lubricate bicycle bearings is to

pack them in vaseline. This form of grease is light enough to lubricate properly and yet has sufficient body to stay in place and not run out. One or two trials will show how much grease to use. When repacking it is best to clean the bearings thoroughly of old grease.

Q.—I am especially interested in the lathe, both wood-working and metal-working. I should like to have the prices of this tool and as soon as possible a price of the rest of the list of tools you sent me. R. L. Belford, Jr., Milton, Pa.

A.—by Councilor Shumway: The Goodell-Pratt lathe which we use in the Y. C. Lab is designed for both wood-turning and metal-turning. It comes in two sizes, twelve-inch and eighteen-inch. For metal-turning all you need to buy extra is a box of cutting tools and a machine rest. The cost of the machine rest is \$16.50 and the cutting tools \$6.00. Both these outfits are sold by the Goodell-Pratt Company, Greenfield, Mass. If you write them, they will be glad to mail you their comprehensive catalogue, a very interesting book in itself. This is a nice little lathe for the small workshop and is well worth the price. I believe the two sizes cost \$30.00 and \$40.00, with a discount. If you would mention The Youth's Companion Lab when writing them, you would undoubtedly find it valuable.

Q.—In making the model airplane and having the rubber motor fixed on the end, how can you wind it up without winding on the sides? Should the propellers be above the wings? Is it better to have one wing or two? Associate Member Carl Copeland, Box 13, Goudbus, Tex.

A.—by Councilor Magoun: Most model airplanes are monoplanes; that is, they have only one wing. You see, the upper wing of a biplane cuts the air off a little from the lower wing so that it is not so efficient. Use one wing, by all means. The center line of the propellers is usually on the same level as the bottom of the wing. Then, you see, the wing is just in the middle of the stream of air forced back by the propeller, and this stream helps to lift the plane. The best way to wind up the rubber motor is to have a loop in the end of the rubber that catches over a hook. This hook is the rear end of the propeller shaft. Of course you might turn the propeller round and round with your finger several times, but the better way is to have an old eggbeater that you can make into a winder. Unhook the rubber from the propeller, hook it to the attachment you have made from the eggbeater, and turn away! When the plane is "cranked up," slip the loop in the rubber back on the hook in the propeller hub. When you let go the propeller —she's off!

Q.—Could you tell me how much you would charge for three yards of your stringing? Jack A. Walsh, box 48, East Berlin, Conn.

A.—by Councilor Frentz: Your letter was evidently written before you had received the third instalment of the article on "How to Make Real Bows and Arrows," for that instalment contained full instructions for making strings. By reading it you will see that it would not be possible to send you three yards of bowstring any more than it would be possible to send you three yards of "pants"; for bowstrings, like "pants," have to be made to fit.



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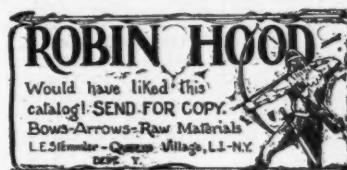
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Some Secrets of Delicious Cake

By BERTHA STREETER

What Kind of Cake Can You Make?

IF you are shunning calories, this is not for your eyes! If you are merely seeking to improve your cake-making and to acquire popularity for your ability to make the kind of cake that melts in the mouth, read every word with care, for Bertha Streeter, the well-known author of "Homemaking Simplified," here reveals some of the innermost secrets of delicious cake! You can keep the cake tin ready for in-between-meals raids, for unexpected (or expected!) guests, for birthdays, parties, picnics, everyday meals; perhaps you can make many useful pennies if you apply her splendid "secrets"!



To begin at the very beginning, use accurate measuring guides: standard measuring cups, preferably glass, the regulation tea and table spoons, and a case knife to level all measures.

I. The Flour

You are most sure of getting the lightest, finest-grained cake if you use the prepared cake flour that may be bought in the package. (This is not the "self-raising flour" sold for batter cakes.) Lacking this prepared cake flour,

you can make a very good substitute at home by combining pastry flour with cornstarch, three cupfuls of the flour to one of the cornstarch being the proper proportion. Make up in quantity for this purpose alone, sifting six times thoroughly to blend the flours, and use it according to the usual directions. Pastry flour makes a lighter, more tender cake than bread flour, but, if you have to use bread flour and have no cornstarch with which to correct the deficiency, use two level tablespoonsfuls less to each cupful than the recipe calls for. (It is very important to have the flour dry; damp flour will make a heavy cake.)

II. Being Exact

Another secret of good cake is to get the exact amount of shortening. Guesswork is responsible for many failures. An exact method of determining the half-cupful of shortening is to fill a measuring glass half full of water, then add enough shortening to make the water fill the glass. Drain off the water, and it is ready for use.

III. Importance of Ingredients

Coarse-grained sugar makes coarse-grained cake. Order fine granulated sugar. Putting the sugar through the flour sifter helps to give an even better texture to the cake. Most recipes call for milk, but water gives much more pleasing results in point of tenderness. Eggs should be fresh and very cold. Only under such conditions is it possible to whip them so they will hold a comparatively large amount of cold air that expands and helps to leaven the batter in the heat of the oven.

IV. Preparing the Baking Tin

Oil is best for greasing the tin. Do not apply it to the sides, but only to the bottom. Then the batter, as it rises, sticks to the sides of the pan and seems to pull away from the center, thus preventing a bulge in the middle of the cake. Apply the oil with a brush. If the pan is not over three inches deep, put about a tablespoonful of flour into it after greasing it; shake it around so that the surface is well coated; then turn out all the flour that does not stick to the tin. For a loaf cake you will get the best results by lining the greased tin with paper, then greasing the paper. When the cake is done and has slightly cooled, invert it, and it will slip out of the pan, helped by its own weight. If the cake burns in a floured tin, the burned part can be removed with a knife or lemon grater more easily than if the tin had not been floured. The paper should be removed before a cake is cold. The cake should then be put back into the pan or into a stone crock, so that it will stay moist.

V. To Become a Professional Mixer

All materials should be assembled and the oven put in good shape before one starts to

make a cake. Then sift together three times all the dry ingredients except the sugar. With the hands, rub the butter and sugar together until you have a creamy mass. Beat the whites of the eggs until you can turn the bowl over without losing a particle—you can't beat egg whites too stiff when you want a nice cake. You can take all the time you want in sifting the flour mixture, creaming the butter and sugar and whipping the egg whites, but when you begin adding the flour mixture, with its leavening agent, you must lose no time in getting the cake into the oven. Stir about one third of the liquid into the sugar mixture; then add the flour and the rest of the liquid alternately, about one third of each at a time, and beat well. Lastly, add the egg whites, whipping or beating them into the batter very lightly—not stirring them in. With this final beating, add the flavoring. Never stir cake after the egg whites have been put in; the beating motion should always be the last one used. Distribute the batter evenly in the pan and bake.

VI. Good Baking

Putting together the ingredients of a cake is important; the baking of the batter requires fully as much consideration. One has to know her oven and to watch it well. The time required for the baking depends largely upon the size and depth of the cake. The heat should increase as the size of the cake decreases. That is, layer cakes and drop cakes require a quick oven to send them up, then a lower heat to finish baking. A perfect oven gives a level surface to the cake. Too hot an oven sends the cake up into a cone at the center. Never move a cake before it has risen to its full height, for then there is danger of its falling because its position has been changed.

About the most satisfactory way to bake a cake is to divide the time of baking into quarters. In the first quarter the cake should rise, but not brown. If it begins to brown in that time, reduce the heat at once. During the second quarter the cake continues to rise and gains a little color. By the end of this quarter a light brown crust should be formed. During the third quarter the cake bakes without any particular change; but this is the critical stage, when any sudden change of heat, such as that caused by opening and closing the oven doors, is apt to cause a slight falling in the center of the cake. The last quarter finishes the baking of the cake. The best test is to watch for the shrinking of your cake from the sides of the pan.

VII. Finishing Touches

If you are planning to frost your cake as the finishing touch, and to use a boiled frosting for this purpose, it makes no difference whether the cake is hot or cold when it is iced. Uncooled frosting, however, must be put on a warm cake if you are to secure the best results.

A great help in icing a cake you want to look especially nice is a band of stiff paper a little wider than the cake is high. When the frosting on top has set, the band may be unpinned and the sides iced. If you are using boiled icing, it may be necessary to set the dish into a pan of hot water to keep the frosting designed for the sides in condition to spread. Keeping such a band on a cake that is not to be cut for a few days



Fashions for the Young Girl

Figured Challis is Very Much "In" for Fall Dresses

Dearest Suzanne: You thought your jersey school dress was a treasure, and so did I—it encouraged me to go hunting for a much needed dress! I looked at ever so many, trying to find what I wanted, and tried some on, too. I had almost given up all hope when I saw this for the astonishingly low sum of \$8.75. It is one of the new challis dresses and about the most becoming thing I've ever walked into ready-made—a flowered pattern, or rather a nosegay design, to describe it accurately. The predominating color in mine is green, with a plain green grosgrain ribbon tie and soft green suede belt, which bring out the green tones of the figures in the material and act as snappy finishing touches. Then the white challis collar adds the final stroke of genius and produces a dress with character and real honest-to-goodness individuality. I think I'd feel at home in class or at a tea in this dress. I could have chosen it in rose, navy or Copenhagen blue besides green, and they had it in all sizes between eight and sixteen. I certainly feel that my search was rewarded when I think of the small hole it makes in my dress allowance this fall!

I'm crazy to hear from you as soon as you have time to write when you get back to school next week—what the new girls are like, who's rooming with who, and all the latest gossip from Sherman Hall. I can hardly wait to come and see you there over the week-end of October 9, and I've already begun to count the days. Hockey try-outs come in



Dress from Filene's
Hoyle Studio

three weeks here, and we're all practising hard. Inter-class games begin the last week in October, and the All-school Team will be picked when they're over.

As ever,

Betty

helps greatly in keeping it moist and in preserving its attractive appearance.

VIII. A Few Unusual Frostings

Parisian cream is a novelty to many cooks. Cream together one half of a cupful of butter and two cupfuls of confectioner's sugar. Flavor with a tablespoonful of burnt-sugar syrup and add last the well-beaten white of an egg. This makes a delicious, soft, rich frosting that will set about an hour after spreading.

Simple fruit frostings that are delicious and unusual are made by mashing five or six ripe strawberries, or one small ripe peach, and mixing in enough confectioner's sugar to make a thick paste. (The latter is especially good on devil's food cake.)

Enough burnt-sugar syrup for five cakes can be made by melting in a saucepan two cupfuls of granulated sugar, stirring constantly until brown. It will form a ball before melting; so don't be alarmed when that happens. Keep stirring, watching the heat carefully so as not to burn the sugar. When it is of the consistency of molasses, remove the syrup from the fire and pour in a cupful of boiling water. This must be done very carefully, or the sudden burst of steam might burn you. Return the syrup to the fire and boil for five minutes. Pour into a small jar what syrup you do not want for immediate use. It keeps well and makes excellent flavoring for cake as well as icing.

For orange-cream filling, mix together thoroughly one cupful of sugar and four tablespoonsfuls of cornstarch with one half of a teaspoonful of salt. Grate in the rind of one orange, then add one half of a teaspoonful of lemon juice and one cupful of orange juice. Bring to a boil and cook for fifteen minutes in a double boiler over hot water. Stir in two tablespoonsfuls of butter and set aside to cool. When cold, beat in one half of a cupful of whipped cream and spread on the cake.

For an icing to go with this, try heating three tablespoonsfuls of orange juice and one teaspoonful of lemon juice just enough to melt a tablespoonful of butter. Add the grated rind of the orange and enough confectioner's sugar to make a thick paste. Spread while the cake is warm. Any leftover might be spread on thin crackers.

A New Contest

IN less than three months we shall be well along on our Christmas presents—perhaps! If you are a girl who believes in avoiding the wear and tear of making last-minute gifts, the extravagance of buying all that you give (if you can buy all that!), haven't you some attractive, original suggestion that you think might help some one else in planning her presents?

One girl who is fond of doing all kinds of things with her fingers and is forever trying out some new stunt, wrote to me the other day about her gift chest in which she saves from time to time the best things she makes. When Christmas or somebody's birthday comes round she dips into that before she plans her shopping list, and usually half her problem is solved right then and there. She told me that three pairs of morning-glory curtain ties copied from those in the July 8th Companion, a traveler's towel for an aunt who is going to Europe early in January, an Italian block-print paper-covered waste-paper basket for her older sister's college room, and all her Christmas wrapping papers, copied from Helen Mary Tiltinghast's article about stenciling, were some of the things she'd copied for it from The Youth's Companion this summer. Then she told me about a dainty set of place cards that she'd just decorated with sealing wax by pasting on pretty flower designs and dripping wax of the various colors over them in the right places. These are for a friend of her mother's who does loads of entertaining and will appreciate having this original set on hand for her next luncheon or dinner.

For the best ideas that you can send me between now and October 7 there will be a first prize of \$5.00—a second prize of \$3.00—and a third prize of \$2.00. The winning suggestions will come out in time for everyone to see them.

Hazel Quay.

8 Arlington Street

Boston, Mass.



THE CHILDREN'S PAGE

THE PERIWIGS HAVE A CONTEST

By Mary Booth Beverley



"I can beat the captain now"

SECOND LIEUTENANT PERIWIG, much to his own surprise, hopped clear over his house. He looked back with a grin of triumph to see if the other periwigs had seen him. As none of them seemed to have noticed, he called to the corporal, "Did you see me hop over the roof of my own house, corporal? I can beat the captain now."

"Ha, beat the captain indeed!" the corporal answered scornfully.

"I am willing to have a race with him or with any other periwig. And I am quite sure I will be the winner." The second lieutenant was sometimes inclined to brag about the things he could do.

"I believe now I could beat the grasshoppers and the crickets, and the frog too."

"What are you talking about," asked the captain, hopping up. "Are you thinking of having a contest with all the hopping creatures? That is a great idea. Let us do it."

So that was the way the great contest started.

Pert was sent out to carry the challenge to all the creatures. This contest was open to those who hop only. But Pert was told not to mention it to the katydids, as they would be sure to claim the victory; no matter who won, they would say katydid.

The contest was to start just as the sun touched the rim of the horizon and was to end when the sun disappeared from view. The red bird had consented to sit in a high tree and drop down a pebble when it was time to start, and fly down among them when the sun had completely set. He was to award the prize, which would be—

That prize had been difficult to select!

When the captain offered the finest wig that weaver could spin, the crickets and grasshoppers laughed so heartily that even the frog grinned in sympathy. But, seeing the hurt look on the little periwigs' faces, the frog straightened his face and said, "I will offer the nicest, biggest beetle in all the woods."

"Oh, no," the captain shuddered, "Whatever could we do with a beetle? Why he might run away with Pert."

"A nice long, juicy blade of grass, is what I would suggest," remarked a grasshopper.

"We never eat grass. As we never eat the same kind of things, don't you think we had better have a prize that we do not have to eat?" asked the captain.

"I have a great scheme, captain: send some one for Mrs. Cow and ask her to come and puff behind us just at the right moment. You know she always carries a high wind about her,

and when she blows it is a regular hurricane!"

"But suppose she puffs at the wrong moment and puffs the grasshopper up?" Pert asked.

"Oh, you could sit on her head and nudge her when the right moment came; ask her to turn on the wind only when a periwig is hopping."

The captain looked very angry. "Do you not know that all must be fair and square in a contest? If she puffs for us, she must puff for the others too. Let us go to the hopping place. It may be that a breeze will spring up at sunset; it often does." They looked very happy then and hopped away behind the captain to the hopping place down by Weeping Willow Pond.

The grasshoppers, crickets and the frog were all waiting for them. The red bird sat in his tree with the small pebble in his mouth.

The hurdle which they were to jump was an old stump from which a very large tree had been cut years ago. The red bird nodded his head for them to take their places in line, as it was nearing sunset. He was looking down at them with so much interest that he forgot to watch the sun; for Pert was acting queerly.



On the afternoon of the great day of the contest the captain looked anxiously up into the sky

Pert was sent out to carry the challenge to all the creatures

There was silence for a moment. Then a cricket spoke quite cheerfully, though shrilly, "If the grasshoppers or the periwigs or the frog should be the winners, we crickets will come and sing them to sleep every night. That will be a wonderful prize, and nobody can eat that!"

The cricket was so pleased with this idea that he began to chirp so loudly that it was difficult to hear the captain, who exclaimed, "O, dear, no! Who could sleep with that noise—I mean music?"

The crickets now looked offended; so the frog, seeing there was trouble brewing, said, "Let the captain's prize stand—a nice wig is good. I have never worn a wig, although I haven't a hair on my head; but if I win the contest, I will wear one. It is so small anyway that it will scarcely be noticed."

The thought of the frog wearing a wig was so funny that it set them laughing, and so they all voted for the wig.

On the afternoon of the great day of the contest the captain looked anxiously up into the sky. If there were only a

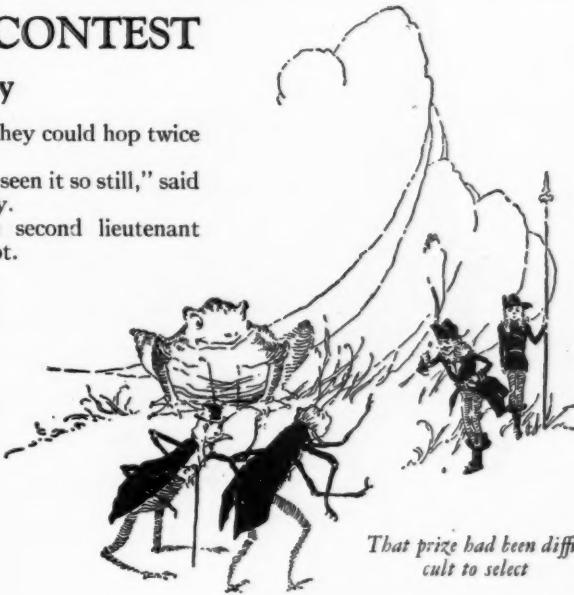
breeze stirring, they could hop twice as high.

"I have never seen it so still," said the captain sadly.

Presently the second lieutenant sprang to his foot.

"I have a great scheme, captain: send some one for Mrs. Cow and ask her to come and puff behind us just at the right moment. You know she always carries a high wind about her,

and when she blows it is a regular hurricane!"



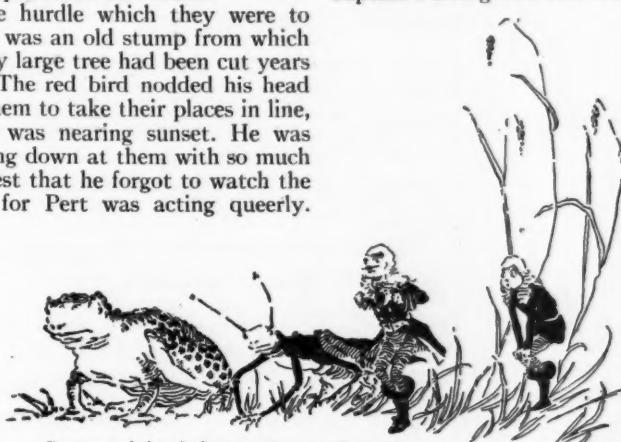
That prize had been difficult to select

Pert had wriggled behind the captain and was bowed forward with his hands upon his knees; his little body swaying back and forth; his cheeks puffed out—he was ready to blow! Suddenly the red bird laughed and swallowed the pebble. He choked for a moment until the pebble went down. Now, what was he to do! The sun was sinking rapidly, and the contestants were waiting. He must fly down and get another pebble.

Down he flew, right behind the captain.

Forgetting in their excitement what the signals were, they sprang into the air just as the red wings closed with a rush behind them.

High into the air went the captain, higher than grasshopper, cricket or frog; being so much lighter than they, he had been wafted farther by the breeze from the red bird's wings. Captain Periwig had won the race.



Pert was behind the captain—ready to blow

HAVE YOU READ THIS YET?

The name of it is "The Rabbit Lantern." Dorothy Rowe, who knows and loves a great many Chinese boys and girls, wrote the stories down, and Ling Jui Tang, a little Chinese boy, made the pictures, and the Macmillan Company of New York published the book. You can get it for \$1.75 plus ten cents a volume for postage.

Be sure to read "The Kitchen God" and find out what happened to little Springtime when he ate some of the rice that belonged to the Kitchen God. And you will certainly want to read "Little Apple and the Long Black Pipe." Little Apple is the name of a girl. Doesn't that seem strange to us? But isn't it fun to read about other children in far away lands?

EDITOR OF THE CHILDREN'S PAGE



Unseen Sources of Long Life

*An open book to the expert * * * **
And revealed to the Owner in terms of Service

The basic sources of motor car value are not always apparent to the eye.

A motor car, like a house, may look more substantial than it really is.

But experts know. And Dodge Brothers Motor Car, subjected to their sharp scrutiny, has received the unqualified endorsement it so richly deserves.

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